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CALSPAN AIR BAG DEPLOYMENT INVESTIGATION

CALSPAN CASE NO. CA96-13

**VEHICLE #1 - 1996 SATURN SW2 WAGON
VEHICLE #2 - 1991 MITSUBISHI ECLIPSE**

LOCATION - STATE OF GEORGIA

CRASH DATE - , 1996

Contract No. DTNH22-94-D-07058

Prepared for:

**U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590**

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

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16. <i>Abstract</i> <p>A two vehicle front to side crash involved a 1996 Saturn SW2 Wagon (Vehicle #1) equipped with dual front air bags which deployed and a 1991 Mitsubishi Eclipse (Vehicle #2). The crash occurred in the month of 1996 in the State of Georgia during the early evening hours.</p> <p>Driver #1, a 26 year old female, who was 177.8 cm (70.0") tall and weighed 131.5 kg (290.0 lb), was en route to her residence after picking up her 5 month old son at her mother's residence. The child who was 71.1 cm tall and weighed 8.6 kg (19.0 lb) was restrained in a rearward facing infant child safety seat which was secured in the right front seat by the available manual lap restraint belt.</p> <p>Vehicle #2, driven by a 19 year old female, was traveling in an easterly direction at a driver reported speed of 89 km/h (55 mph) and had completed travel in a right curve and was proceeding on a straight segment of the roadway. As Vehicle #2 approached Vehicle #1, Driver #1 initiated a left turn at a four leg intersection across Vehicle #2's travel path. The front of Vehicle #1 struck the left side of Vehicle #2 resulting in a Collision Deformation Classification (CDC) of 01-FLEE-1 for Vehicle #1 and a 11-LYES-2 for Vehicle #2. The delta V computed by the Smash Program for Vehicle #1 was 10 km/h (6 mph) and 11 km/h (7 mph) for Vehicle #2.</p> <p>During the crash, both air bags in Vehicle #1 deployed. The passenger side mid mount air bag module cover rotated upward as designed and contacted the upper rear surface of the child safety seat's handgrip. The air bag subsequently contacted the rear surface of the child safety seat back support propelling the seat rearward in a head over heel rotational trajectory. During this contact sequence, the child's head compressed the foam pad located under the seat covering and loaded the vinyl seat back support. As a result, he sustained a large subgaleal hematoma and effusion over the right scalp area, a depressed fracture of the right parietal-occipital region, and a contusion of the left fronto temporal area with a small subdural hematoma.</p> <p>The child was transported via ambulance to a nearby hospital where he was evaluated and subsequently transferred to a neurological ICU at another hospital. On the fourth day he experienced a seizure. He was discharged to his residence six days after the crash. Driver #2, the 19 year old female who was 172.7 cm (68.0") tall and weighed 56.7 kg (125 lbs.) exited the vehicle under her own power. She was not injured.</p>			
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CALSPAN AIR BAG DEPLOYMENT INVESTIGATION**CALSPAN CASE NO. CA96-13****VEHICLE #1 - 1996 SATURN SW2 WAGON****VEHICLE #2 - 1991 MITSUBISHI ECLIPSE****LOCATION - STATE OF GEORGIA****CRASH DATE - 1996*****Background***

This crash was reported on the Internet by a rescue worker and discovered by another SCI Team. The SCI Team forwarded the information to the Field Operations Branch of the National Highway Traffic Safety Administration (NHTSA) which subsequently notified the Calspan SCI Team. E-mail correspondence was conducted with the rescue worker which verified the applicability of the crash requirements to the SCI program. The vehicle was inspected at a collision shop five days after notification from NHTSA which was less than three weeks after the date of the crash.

SUMMARY

A two vehicle front to side crash involved a 1996 Saturn SW2 Wagon (Vehicle #1) equipped with dual front air bags which deployed and a 1991 Mitsubishi Eclipse (Vehicle #2). The crash occurred in the month of 1996 in the State of Georgia during the early evening hours.

Vehicle #1 was traveling in a westerly direction on a two lane, straight, undivided, rural, dry, asphalt roadway surface which had a posted speed limit of 89 km/h (55 mph). There were no adverse weather conditions although the setting sun may have restricted Driver #1's view of Vehicle #2 which was traveling in the opposing travel lane.

Driver #1, a 26 year old female who was 177.8 cm (70.0") tall and weighed 131.5 kg (290.0 lbs.), was en route to her residence after picking up her 5 month old son at her mother's residence. The child who was 71.1 cm tall and weighed 8.6 kg (19.0 lb) was restrained in a rearward facing child safety seat which was secured in the right front seat by the available manual lap restraint belt. The right front seat was adjusted at the mid-track position which placed the rear plane of the safety seat within close proximity to the passenger side air bag module cover.

Vehicle #2, driven by a 19 year old female, was traveling in an easterly direction at a driver reported speed of 89 km/h (55 mph) and had completed travel in a right curve and was proceeding along a straight segment of the roadway. As Vehicle #2 approached Vehicle #1, Driver #1 initiated a left turn at a four leg intersection across Vehicle #2's travel path.

Driver #1 claimed she did not see Vehicle #2 prior to making the turn, but as she was in the turn detected the approach of Vehicle #2 and applied full brakes as determined by the 0.5 m (1.6') tire skid marks. Driver #2 attempted to avoid the crash by braking and steering right.

Vehicle #2 departed the right side of the roadway and was struck along the left side plane by the left front corner of Vehicle #1. Vehicle #1 rotated in a counterclockwise direction and came to rest on the intersecting roadway. Vehicle #2 rotated in a counterclockwise direction, traveled along the shoulder on the south side of the roadway, re-entered the eastbound travel lane, crossed the roadway, departed the north side of the roadway onto the adjacent grass shoulder, and came to the final rest position (FRP) partially on the westbound travel lane 68 meters (223 ft.) from the point of impact (POI).

The delta V as computed by the Smash Program for Vehicle #1 was 10 km/h (6 mph) and 11 km/h (7 mph) for Vehicle #2. During the crash, both air bags in Vehicle #1 deployed. The driver, who was wearing the manual lap and shoulder belt system suffered minor soft tissue injuries of the forearms which were attributed to contact with the driver air bag. She also sustained contusions of the chest and abdominal area which were attributed to loading on the lap and shoulder restraint belts.

The passenger side mid mount air bag module cover rotated upward as designed during the Supplemental Inflatable Restraint (SIR) actuation sequence and contacted the upper rear surface of the child safety seat's handgrip. This was evident from the vertical transfer/abrasion marks noted on the surface of the air bag module cover which were located along the lower edge of the cover. These transfer marks were consistent in size and shape to the design feature of the handgrip.

The passenger side air bag subsequently contacted the rear surface of the child safety seat back support resulting in an abraded area along the left vertical strut of the shell. The seat was propelled rearward in a head over heel rotational trajectory. During this air bag contact sequence, the child's head compressed the foam pad located under the seat covering and loaded the vinyl shell. As a result, he sustained a large subgaleal hematoma and effusion over the right scalp area, a depressed fracture of the right parietal-occipital region, and a contusion of the left fronto temporal area with a small subdural hematoma. The skull fracture and contusion of the right indicated the child's head was positioned slightly toward the driver at the time of the crash.

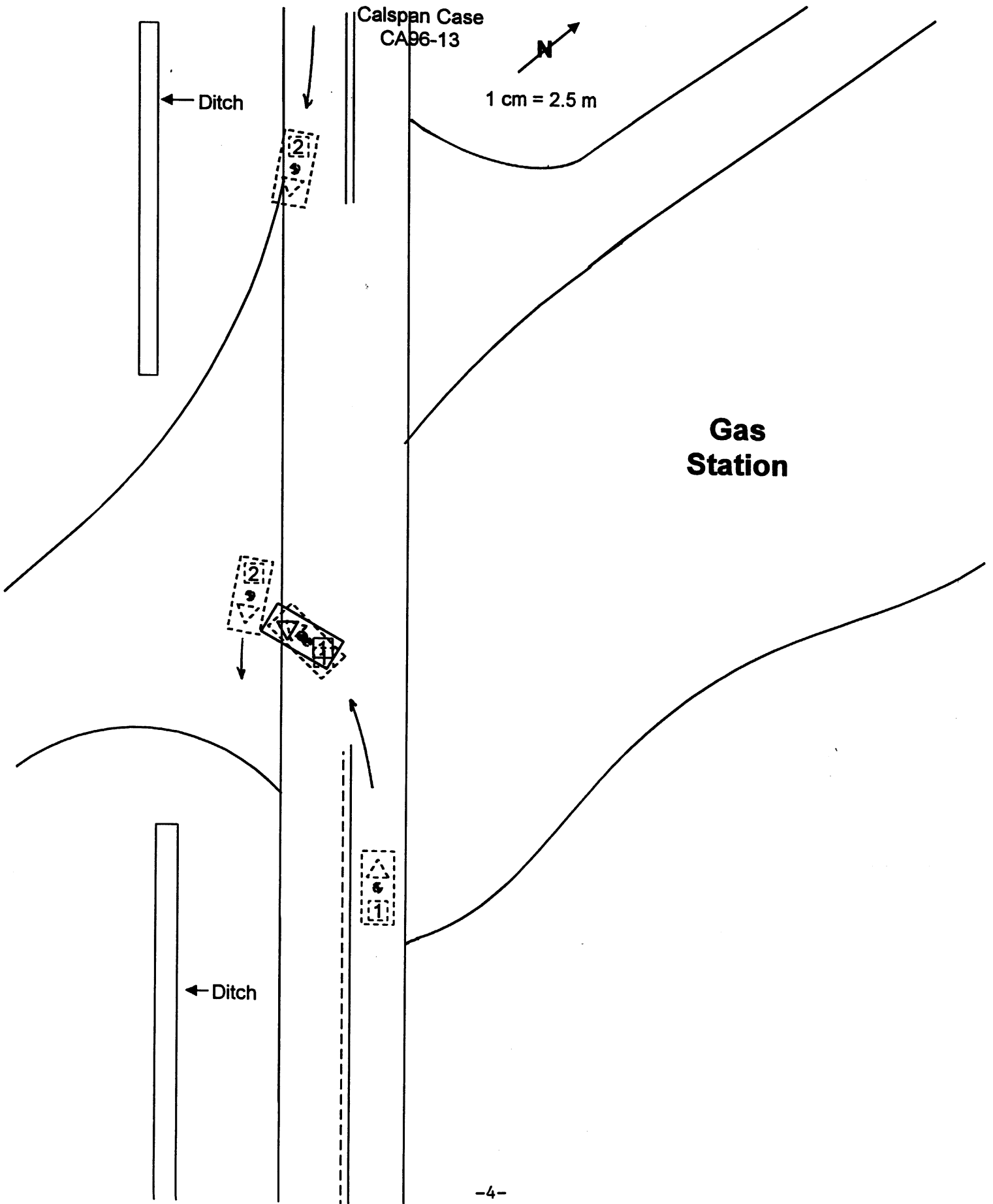
The child safety seat contacted the right front seat back support as noted by a 2.2 cm (0.9") long abrasion in the seat back support fabric which was located 37.5 cm (14.75") above the seat cushion and 10.2 cm (4.0") right of the seat back centerline. The abrasion was attributed to contact by the adjustable carry handle which was in the normal carry position. The safety seat came to rest on the seat cushion with the lap belt still attached to the safety seat.

The child was removed from the child safety seat by Driver #1 and held until the arrival of rescue. He was transported via ambulance to a nearby hospital where he was evaluated and subsequently transferred to a neurological ICU at another hospital. On the fourth day he experienced a seizure and was given an anti-seizure medication (Decadron). The grandmother indicated that she held the baby continuously for the first twenty-four hours in an attempt to comfort the distraught child. He was discharged to his home six days after the crash.

Driver #2, the 19 year old female who was 172.7 cm (68.0") tall and weighed 56.7 kg (125 lbs.) exited the vehicle under her own power. She was not injured.

Vehicle #1 sustained direct contact damage 30 cm (12") wide on the left front bumper. The maximum rearward displacement of the front bumper was 9.1 cm (3.6") located at the left front corner. The CDC for this impact was 01-FLEE-1.

The exterior damage to Vehicle #2 was located on the left side plane with a maximum lateral displacement of 11.4 cm (4.5") located 73.7 cm (29.0") forward of the left rear axle. The CDC for this impact was 11-LYES-2.





CRASH DEMOGRAPHIC DATA	
Location:	Two lane undivided roadway at a four leg intersection
State:	State of Georgia
Area/Type:	Rural/Commercial
Accident Date/Time:	September, 1996/ early evening hours
Investigating Police Agency:	State Police
Accident type:	Opposing travel direction, turn across path
Air Bag Vehicle Passenger Injury Severity:	AIS-4 (Severe)
AMBIENCE	
Viewing Conditions:	Daylight
Weather:	Clear
Road Surface:	Dry
HIGHWAY	
Type:	State route with an intersecting local route
Number of Lanes:	2
Width:	6.6 m (21.6 ft)
Surface:	Asphalt
Median:	None
Edge:	North edge- grass shoulder and gas station, South edge- grass shoulder
Vertical Alignment:	Level
Horizontal Alignment:	Straight with a curve to the left 76 meters (250') west of intersection
Estimated Coefficient of Friction:	0.8 μ
Traffic Density:	Light
TRAFFIC CONTROLS	
Signals:	None

Signs:	None for east/west travel directions, unrelated stop signs for north/south intersecting roadway
Markings:	Solid broken yellow centerline with passing permitted in southeast direction, solid white road edge lines with broken white line at gas station entrance.
Speed Limit:	89 km/h (55 mph)
VEHICLE #1 DESCRIPTION	
Description:	1996 Saturn SW2 Wagon, 4 door wagon
V.I.N.:	1G8ZK8278TZ (Serial # omitted)
Color:	Green
Odometer:	9,829 km (6,109 miles)
Engine:	1.9 L L4
Transmission:	Automatic
Steering:	Power steering
Brakes:	Power assisted front disc and rear drum brakes
Padding:	Upper and mid instrument panel, glove compartment door, soft edge steering wheel rim and air bag module covers, door panels, door arm rests, sunvisors, adjustable head restraints
Active Restraints:	Manual lap and shoulder belts with inertia activated locking retractors in the four out-board seating positions, the left front adjustable D-ring was in the full up position, the right front D-ring was in adjusted to the full down position, manual lap belt in center rear
Passive Restraints:	Dual front air bags [Supplemental Inflatable Restraint (SIR)] which deployed as a result of the impact with Vehicle #2
Defects:	None
Tow Status:	Towed due to damage
VEHICLE #2 DESCRIPTION	
Description:	1991 Mitsubishi Eclipse
V.I.N.:	4A3CS54U6ME (Serial # omitted)
Color:	Green
Odometer:	163,635 k (101,681 miles)

Engine:	1.8 L
Transmission:	5-speed manual, center console mounted transmission selector lever
Steering:	Power steering
Brakes:	Front disc and drum rear brakes
Padding:	Instrument panel, glove compartment door, sunvisors, soft-edged steering wheel rim, door panels, door armrests, dual fold-down center armrests, adjustable head restraints
Active Restraints:	Manual lap belts in the front outboard seating positions, manual lap and shoulder belts in rear outboard seating positions
Passive Restraints:	Two point motorized torso belts
Defects:	None
Tow Status:	Driven from scene

VEHICLE #1 DAMAGE

Exterior:

The left front bumper of the 1996 Saturn Wagon (Vehicle #1) struck the left side plane of the 1991 Mitsubishi Eclipse (Vehicle #2). Vehicle #1 sustained direct contact damage to the front bumper starting 38.1 cm (15.0") left of the vehicle centerline and extending 30.5 cm (12.0") to the left corner of the bumper. The front bumper sustained a maximum rearward displacement of 9.1 cm (3.6"). Measured crush values along the front bumper are listed below:

Bumper Crush		
$C_1 = 9.1 \text{ cm (3.6")}$	$C_2 = 2.5 \text{ cm (1.0")}$	$C_3 = 0.5 \text{ cm (0.2")}$
$C_4 = 0$	$C_5 = 0$	$C_6 = 0$

Components damaged in the crash included: the front bumper fascia; the hood; the left front fender; and windshield.

CDC: 01-FLEE-1

Repair Cost:\$4,309.02

Interior:

Interior damage to the Saturn Wagon was associated with air bag deployment and occupant contacts. There was no interior damage due to intrusion resulting from the external damage to the vehicle.

The windshield exhibited two separate spider web type fractures which were attributed to driver contact. The first fracture was located 8.3 cm (3.25") below the windshield header and 43.8 cm (17.25") left of the vehicle centerline. A light smudge mark over the fracture site was attributed to contact by the driver's left hand. The second was located 27.9 cm (11.0") left of the vehicle centerline and 8.9 cm (3.5") down from the windshield header. A light smudge mark was also noted in the vicinity of the fracture which was attributed to contact by the driver's right hand.

There were two small scuffs located on the eyebrow of the driver's side instrument panel in-line with the 9 and 3 o'clock position of the steering wheel rim and the two windshield fractures. A smudge mark was noted on the face of the rear view mirror. There was no damage to the rim of the steering wheel and no movement of the sheer capsules.

A smudge mark was located on the knee bolster near the hood release handle located 45.7 cm (18.0") left of the vehicle centerline. This was attributed to contact by the driver's left knee. Another scuff mark located on the knee bolster was located 21.6 cm (8.5") left of the vehicle centerline.

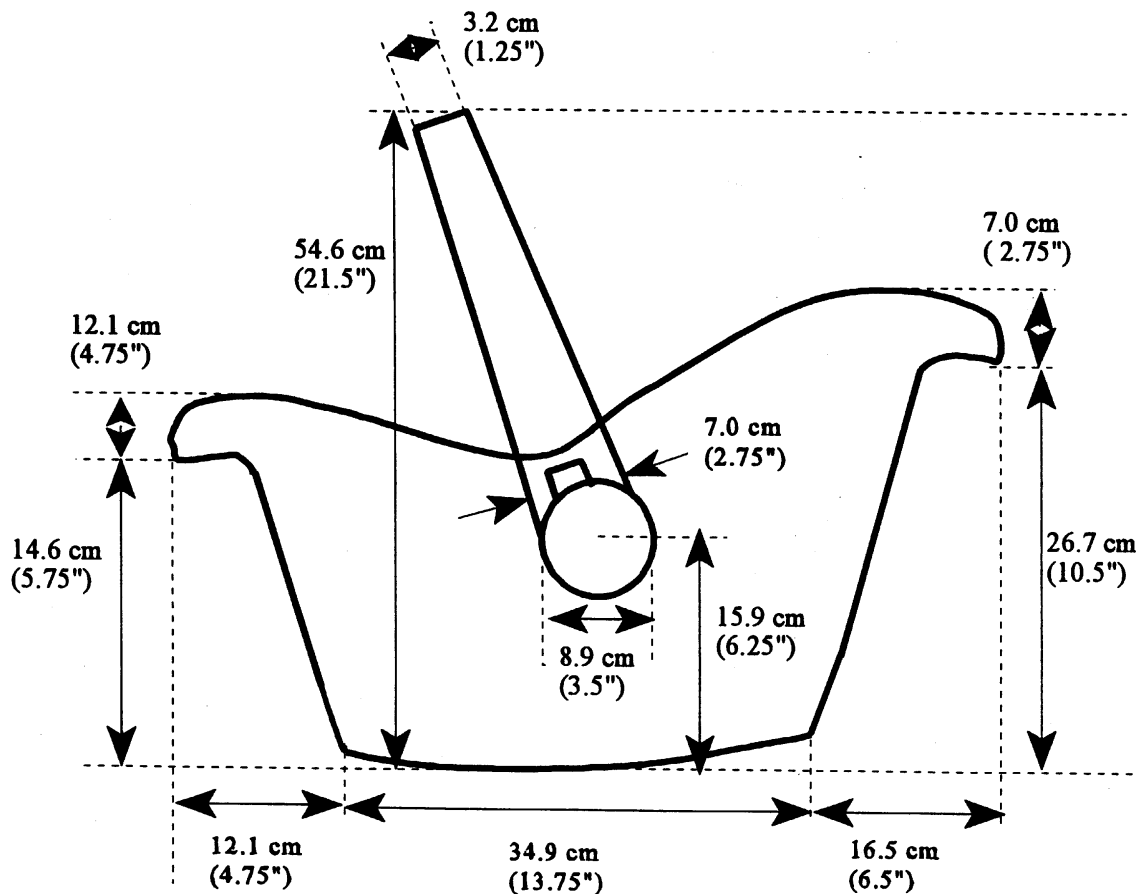
The driver's seat was positioned in the rear-most position on a seat track which had an adjustment range of 17.8 cm (7.0"). The horizontal distance between the seat back support and the steering hub was 71.1 cm (28.0"). The horizontal distance measurement was taken 48.3 cm (19.0") above the seat cushion junction with the seat back support. The tilt column steering wheel was adjusted to the center position which measured 32 degrees above horizontal. The left front D-ring was adjusted to the full up position. The vertical adjustment range of the D-ring was 9.2 cm (3.625").

The right front passenger seat was adjusted 10.2 cm (4.0") rearward of the full forward position on a seat track which had an adjustment range of 15.2 cm (6.0"). The seat back angle was 18 degree rearward from vertical and the leading edge of the seat cushion had an incline angle of 15 degrees. The vertical distance from the leading edge of the seat cushion to the floor was 24.1 cm (9.5"). The horizontal distance from the seat back support to the instrument panel was 68.6 cm (27.0") measured at 38.1 cm (15.0") above the seat and seat back junction. The right front D-ring was adjusted to the lowest position.

There was no evidence of occupant contact on either driver or passenger side air bags, but both driver and passenger side bags displayed evidence of black transfer marks fabric weave disruption resulting from contact with the underside of the air bag module flaps during the deployment sequence.

Child Safety Seat:

The child safety seat was a **Infant Car Seat (rear-facing)** style which was secured in the right front passenger seat with the manual lap belt. The date of manufacture was **Measured dimensions are shown in the following illustration:**



Infant Car Seat

The child was restrained with the available three point harness which secured the continuous loop shoulder straps together in the leg area (refer to photograph #83 on page A-42). The seat was not equipped with a chest shield or tether strap. The child safety seat incorporated a 0.6 cm (0.25") thick multi-color padded seat covering over a dense 1.9 cm (0.75") thick foam padding which was attached to the child seat back support.

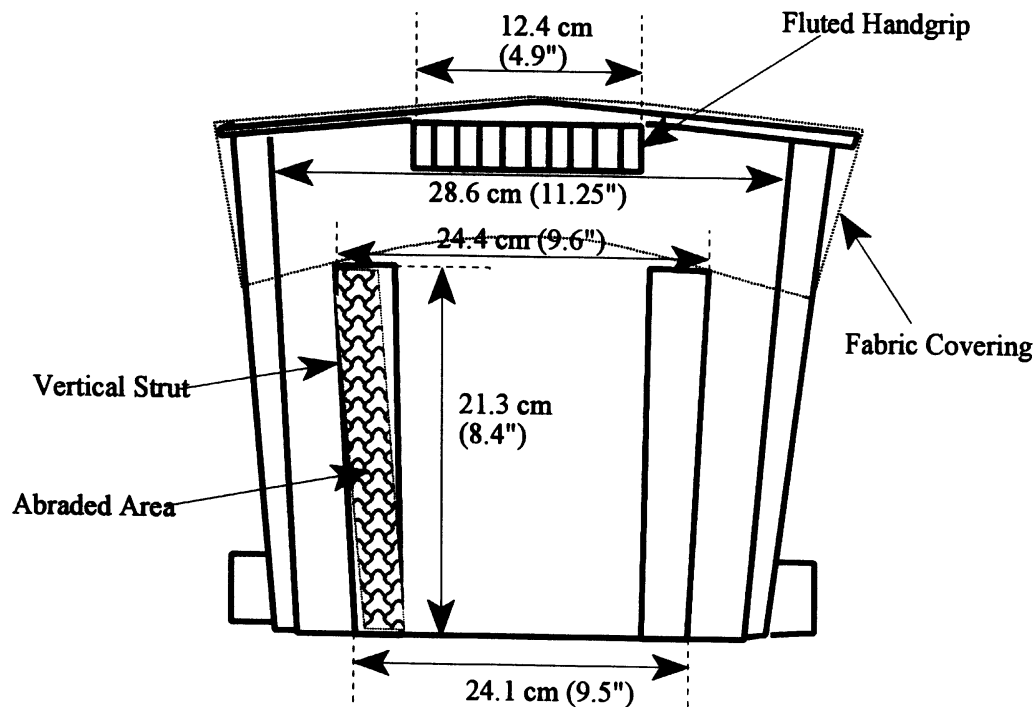
Warning labels were attached to outside surfaces of the safety seat back support. The bright yellow highlighted portion of the label warned of the risks associated with putting the seat in a seat protected by an air bag. The warning read as follows:

WARNING: DO NOT PLACE THIS RESTRAINT IN THE FRONT SEAT OF A VEHICLE THAT HAS A PASSENGER-SIDE AIRBAG. SERIOUS INJURY TO CHILD CAN OCCUR IF AIRBAG INFLATES AND STRIKES A REAR-FACING RESTRAINT.

As seen in photograph #90 on page A-45, the majority of the highlighted warning, however, was obscured by the safety seat covering.

The warning labels were written in two languages. The label on the right side of the seat was written in English while the label on the left side (i.e., the side facing the driver) was written in Spanish. At the bottom of each label was an illustration which appeared to be in conflict with the yellow highlighted warning. It showed the proper method for securing the child safety seat using the vehicle restraint belt in the right front seat (refer to photograph #92 on page A-46).

The child safety seat covering was torn along both upper rear corners from contact by the passenger side air bag module cover during the deployment sequence. The tear on the left side was 6.4 cm (2.5") long and extended laterally from the left edge and 1.3 cm (0.25") below the top edge. The tear on the right side measured 5.1 cm (2.0") long extending laterally from the right edge and 1.3 cm (0.25") below the top edge.



Outside Surface of the Child Safety Seat Back Support

The disk-like protrusions located on the rear surface of the upper handgrip of the child safety seat were contacted by the passenger side air bag module cover as the cover rotated upward during deployment. The handgrip area was 12.4 cm (4.9") wide and had eleven circular disks (refer to photograph #97 on page A-49) which were spaced 1.3 cm (0.5") apart. The left vertical strut of the rear surface of the child safety seat was abraded over the entire surface which was attributed to contact by the passenger side air bag during deployment.

The adjustable carry handle was locked in an upright position perpendicular to the child's body. The handle contacted the right front seat back support as noted by an abrasion in the seat fabric after the safety seat was propelled rearward by the passenger side air bag during the deployment sequence.. The handle did not exhibit any damage.

Vehicle #2:

Exterior

The 1991 Mitsubishi Eclipse sustained direct contact damage along the left side plane which began 16.5 cm (6.5") forward of the left rear axle and extended forward 213.4 cm (84.0"). Maximum lateral displacement of 11.4 cm (4.5") was located 73.7 cm (29.0") forward of the left rear axle. Crush values below the rub strip are listed below:

Crush Along Left Side Plane		
$C_1 = 1.3 \text{ cm (0.5")}$	$C_2 = 9.8 \text{ cm (3.9")}$	$C_3 = 5.7 \text{ cm (2.3")}$
$C_4 = 6.1 \text{ cm (2.4")}$	$C_5 = 4.4 \text{ cm (1.8")}$	$C_6 = 3.8 \text{ cm (1.5")}$

The lower air spoiler sustained several cracks across the fiberglass front surface and was broken at the right corner as a result of contact with the ground.

CDC:

Repair Cost: Estimated at \$5,000 by the driver.

Interior:

The Mitsubishi Eclipse sustained no intrusion or occupant contact damage as a result of the crash. The 2-point motorized automatic torso belt was locked in the use position at the time of the inspection. The motor apparently failed to operate after the crash.

SUPPLEMENTAL INFLATABLE RESTRAINT (SIR) SYSTEM

Vehicle #1:

Driver Side Air Bag

The 1996 Saturn Wagon was equipped with a dual front Supplemental Inflatable Restraint (SIR) system that deployed as a result of the impact with Vehicle #2. The driver side air bag module opened in an "T" pattern with a vertical seam which measured 13.7 cm (5.4") in height and 20.3 cm (8.0") in width. At the mid point along the vertical seam, the flap was notched with a 3.8 cm (1.5") lateral and 1.3 cm (0.5") vertical area containing the manufacturer's logo.

A 3.5 cm (1.4") long scuff mark was noted on the lower surface of the right flap of the driver side air bag module cover. It was located 0.6 cm (0.3") right of the center tear seam and 1.3 cm (0.5") above the bottom seam. This mark was attributed to contact with the driver's right forearm during the SIR actuation cycle.

The driver side air bag which measured 53.3 cm (21.0") in diameter contained four tethers that were sewn to the face of the bag with a circular 17.8 cm (7.0") diameter double row of blue stitching. The back of the bag was constructed of fine mesh nylon and had two 1.9 cm (0.75") vent ports spaced 14.6 cm (5.75") apart in the 1 o'clock/ 11 o'clock positions.

The face of the driver air bag exhibited a 5.1 cm (2.0") high black striation transfer which was located 1.3 cm (0.5") below the horizontal centerline and 12.7 cm (5.0") left of center extended 27.9 cm (11.0") to the right. This transfer was attributed to contact with the underside of the air bag module cover during deployment. There was no evidence of occupant contact on the driver's side air bag.

Passenger Side Air Bag

The right front passenger side air bag was a mid-mount design with an upward opening air bag module cover. The module cover was a rectangular shape with rounded corners which measured 30.5 cm (12.0") laterally and 12.1 cm (4.8") vertically. The surface of the module cover exhibited eleven vertical scratch type abrasions which aligned with the handgrip design of the child safety seat. These scratches were located 10.5 cm (4.125") right of the left edge and extended 1.9 cm (0.75") upward from the bottom edge of the cover (refer to photograph #72 on page A-36). Abrasions noted above this area and located 1.9 cm (0.75") below the top edge of the module cover were attributed to contact with the upper edge of the instrument panel during the upward rotation of the cover.

The passenger side air bag was constructed with one mid level tether designed to limit the travel of the air bag into the occupant space. The 38.1 cm (15.0") wide tether was attached to the air bag with a double row of stitching 31.8 cm (12.5") from the inflator unit. The longitudinal excursion of the air bag from the mid instrument panel measured 63.5 cm (25.0"). The lateral width of the air bag was 78.7 cm (31.0"). A label provided the following identification:

Several black smudge marks were noted on the center face of the passenger side air bag (refer to photograph #74, #75 on pages A-37, A-38). These marks were the result of loading on the underside of the air bag module cover during deployment. The marks were mainly confined to an area starting at the air bag center line and extending 10.2 cm (4.0") to the right. This area was located 74.0 cm (29.1") from the inflator unit.

Driver #1 indicated that when she purchased the vehicle, she was aware that the vehicle was equipped with the dual frontal air bag system. She read through the Vehicle Owner's manual, but failed to read the section describing the SIR system (refer to photographs #100 - #102 on pages A-50, A-51). The driver indicated the primary reason for purchasing this vehicle was for the additional interior space provided by the station wagon body type and not necessarily for the SIR system.

Vehicle Velocity Estimates:

	Vehicle #1	Vehicle #2
Travel Speed:	89 km/h (55 mph)	89 km/h (55 mph)
Impact Speed:	9 km/h (5 mph)	83 km/h (51 mph)
Total Delta V:	10 km/h (6 mph)	11 km/h (7 mph)
Longitudinal Delta V:	-9 km/h (-5 mph)	-9 km/h (-6 mph)
Lateral:	-5 km/h (-3 mph)	5 km/h (3 mph)
Energy Absorption:	9,728 joules (7,174 ft-lb)	11,910 joules (8,784 ft-lb)

The impact speed and velocity changes were computed by the damage and trajectory algorithms of the Smash program.

COLLISION SEQUENCE

Pre-Crash:

The 26 year old driver of the 1996 Saturn SW2 Wagon (Vehicle #1) was returning home from work after picking up her five month year old son from her parent's home where he was being cared for while she was at work. She placed him in the right front passenger seat in a rear-facing Infant Car Seat which was securely fastened in place with the right front passenger lap belt. The seat was adjusted 10.2 cm (4.0") rearward of the full forward position on a seat track which had an adjustment range of 15.2 cm (6.0").

Driver #1 indicated she was traveling at the posted speed limit of 89 km/h (55 mph) in a westbound direction on a two lane undivided roadway. The ambient conditions were warm with a setting sun. The driver was properly wearing the lap and shoulder belt with the D-ring adjusted at the top-most position.

Driver #1 slowed and initiated a left turn at a four leg intersection. She indicated the sun was in her eyes which prevented her from observing the approach of Vehicle #2 from the opposite direction. The dark green color of Vehicle #2 may have blended into the vegetation background which may have contributed to Driver #1's lack of visual perception to the approach of Vehicle #2.

As Vehicle #1 initiated the left turn, Driver #2 attempted to avoid the crash by braking and steering to the right. Vehicle #2 departed the right side of the roadway and traveled across the northbound intersecting travel lane adjacent to the intersection boundary. Tire skid marks noted at the scene indicated Driver #1 observed the approach of Vehicle #2 and applied full brakes to avoid the crash (refer to photograph #8 on page A-4).

Crash:

Vehicle #1 struck Vehicle #2 on the left side plane with the left front corner of the bumper resulting in a Smash computed delta V of 10 km/h (6 mph) for Vehicle #1 and 11 km/h (7 mph) for Vehicle #2. The impact resulted in the deployment of both front air bags in Vehicle #1.

The upper handgrip of the child safety seat was contacted by the passenger side air bag module cover as it rotated upward during the deployment sequence. The expanding air bag contacted the rear surface of the child safety seat propelling it in a rearward rotational motion. This contact event accelerated the safety seat against the child's head which resulted in a depressed fracture of the right parietal-occipital bone, a subgaleal hematoma over the right scalp, contusion of the left fronto temporal area with a small hematoma, and a closed head injury with neurologic deficit. The safety seat's carry handle contacted the right front seat back support. The seat rebounded forward and came to rest on the right front seat cushion.

Driver #1 move forward against the lap and shoulder belt system resulting in contusions and abrasions of her chest and abdominal area. The driver side air bag contacted her forearms resulting in her hands contacting the windshield.

Post Crash:

Final Rest - Vehicle #1 came to rest facing in a southbound direction near the point of impact. Vehicle #2 traveled along the south shoulder, re-entered the roadway, traveled diagonally across both travel lanes in counterclockwise rotation and departed the north side of the roadway. It came to the final rest position facing in a northbound direction with the front tires on the north shoulder and the rear tires on the roadway 68 meters (223 ft.) from the point of impact.

Driver Activities - The child remained secured in the child safety seat and was crying. Driver #1 removed him from the seat and sat on the adjacent grass shoulder rocking him in her arms until rescue arrived.

Police Activities -The police arrived at the scene seven minutes after the crash.

Rescue Activities - The child was placed on a backboard where his head was strapped down. The child and Driver #1 were transported by the EMS via ambulance to a nearby hospital. After an initial evaluation, the child was transferred to another hospital where he was admitted to the neurological ICU.

Scene Clearance - Vehicle #1 was towed from the scene to a collision repair facility where an inspection was completed for this report. Vehicle #2 was driven from the scene.

HUMAN FACTORS/OCCUPANT DATA

Vehicle #1

Vehicle #1	Driver	Right Front Passenger
Age/Sex:	26 year old female	5 month old male
Height:	177.8 cm (70.0")	71.1 cm (28.0")
Weight:	131.4 kg (290.0 lbs)	8.6 kg (19.0 lbs)
Manual Restraint System Usage:	Wearing the lap and shoulder belt system	Rear facing infant child safety seat secured with the right front lap belt
Usage Source:	Vehicle inspection, driver interview, police accident report	Vehicle inspection, driver interview, police accident report
Eyewear:	None	None
Jewelry:	Watch on left wrist with large crystal which was broken in the crash, wedding ring on third finger of left hand, ring on fourth finger of right hand	None
Clothing:	Blue shirt and black pants	Purple plaid sleeveless one-piece outfit
Vehicle Familiarity:	Purchased vehicle new three months before crash, traded in a Saturn sedan for this vehicle due to the need for additional interior space.	
Route Familiarity:	Very familiar, travel daily	
Trip Plan:	From work to parents home to own home, crash occurred within two miles of Driver #1's residence	

Vehicle #1	Driver	Right Front Passenger
Type of Medical Treatment:	Treated and released.	Transported to a nearby hospital, evaluated, and transferred to a second hospital with a neurological ICU where he remained for six day before being released

Vehicle #2

Vehicle #2	Driver #2
Age/Sex:	19 year old female
Height:	172.7 cm (68.0")
Weight:	56.7 kg (125.0 lbs)
Restraint System Usage:	Wearing only the automatic shoulder belt, the manual lap belt was not used
Usage Source:	Driver interview
Vehicle Familiarity:	Very familiar, driver's personal car, acquired 1996
Route Familiarity:	Very familiar
Trip Plan:	Not known
Type of Medical Treatment:	Not injured, none required

INJURY DATA

Vehicle #1

Driver #1 and the five month old right front occupant were transported via ambulance to a local treatment facility where the boy was subsequently transferred to a neurological Intensive Care Unit. Driver #1 left the local treatment facility to travel with her son before the facility could complete their evaluation and treatment of her injuries. The boy was hospitalize for six days and discharged to his home.

DRIVER #1 INJURIES	INJURY SEVERITY (AIS-90)	INJURY SOURCE
1. Sprained left wrist	751420.12	Windshield

DRIVER #1 INJURIES	INJURY SEVERITY (AIS-90)	INJURY SOURCE
1. Sprained left wrist	751420.12	Windshield
2. Laceration of middle finger on the left hand	790600.12	Windshield
3. Scratches on inside of left forearm	790202.12	Driver side air bag
4-5. Bruises on inside surface of both forearms	790402.11 790402.12	Driver side air bag
6-7. Abrasion/contusion on stomach area	590202.14 590402.14	Lap belt
8. Contusion across chest	490402.14	Shoulder belt

RIGHT FRONT PASSENGER INJURIES	INJURY SEVERITY (AIS-90)	INJURY SOURCE
1. 3 mm depressed fracture of the right parietal-occipital region	150404.31	Passenger side air bag module cover and air bag interaction with the child safety seat
2-3. Contusion of the left fronto temporal area with a small subdural hematoma	140604.32 140652.42	Passenger side air bag module cover and air bag interaction with the child safety seat
4. Large subgaleal hematoma and effusion over the right scalp area	190402.11	Passenger side air bag module cover and air bag interaction with the child safety seat
5. Closed head injury with neurologic deficit	160404.20	Passenger side air bag module cover and air bag interaction with the child safety seat

OCCUPANT KINEMATICS

Driver #1

The 26 year old female driver of the 1996 Saturn Wagon was driving with the seat adjusted to the rear most position on a seat track which had an adjustment range of 17.8 cm (7.0"). The horizontal distance between the seat back support and the steering hub was 71.1 cm (28.0") at a height of 48.3 cm (19.0") above the junction with the seat cushion junction and seat back support. The tilt column steering wheel was adjusted to the center position. She was wearing the manual lap and shoulder belt system. The seat belt upper anchor D-ring was adjusted to the full up position. The vertical adjustment range was 9.2 cm (3.625").

Driver #1 was in the process of making a left turn and subsequently applied the brakes in a panic stop to avoid contact with Vehicle #2. The left front bumper of Vehicle #1 struck the left side plane of Vehicle #2 in a glancing type impact.

During the impact sequence, Driver #1 moved forward and loaded the lap and shoulder belt system as evidenced by the reported contusion across the chest and contusions/abrasions of the abdominal area. Her hands were located along the upper portion of the steering wheel rim at the time of the air bag deployment sequence. The expanding driver side air bag contacted the driver's forearms resulting in typical contusion/abrasion patterns. Both forearms were propelled upward with her hands subsequently striking the windshield resulting in two spider web type fracture patterns. She sustained a laceration of the left third finger and sprain of the left wrist which were attributed to this contact mechanism. A scuff mark along the right side of the steering column was attributed to contact by the driver's right knee. She did not report any injury related to this contact mechanism.

Right Front Passenger

The five month old male passenger was secured in a rearward facing infant child safety seat which was secured in the right front passenger seat with the manual lap belt. The boy's grandmother and daycare provider described the procedure for securing the child safety in the vehicle as requiring two people to accomplish this task. Prior to the crash, she indicated that her daughter (Driver #1) sat in the driver seat while the grandmother routed the lap belt through the designated slots at the top of the upper sides and handed the belt tab over to the driver. After the driver latched the belt into the buckle, the grandmother pulled the belt tight. The child was restrained in the safety seat by the seat's safety harness.

The right front seat was adjusted 10.2 cm (4.0") rearward from the full forward position on a seat track which had an adjustment range of 15.2 cm (6.0"). The seat back angle measured 18 degrees rearward from vertical and the seat cushion had a 15 degree incline. The horizontal distance from the right front passenger seat back support to the air bag module measured 68.6 cm (27.0") at 38.1 cm (15.0") above the seat cushion. The overall length of the child safety seat when secured by the manual lap belt was 63.5 cm (25.0").

As the vehicle decelerated during the braking evasive maneuver, the child safety seat rocked forward placing the upper portion of the its seat back support within close proximity to the passenger side air bag module cover at the time of the air bag deployment sequence. The child's head was positioned slightly toward the driver as determined from the injury pattern to the child's head.

During the SIR deployment cycle, the passenger side mid mount air bag module cover rotated in the typical upward direction and contacted the upper handgrip of the child safety seat along its leading edge. This was determined by the impression transfer of the handgrip in the vinyl surface of the module cover. The rear surface of the safety seat's back support was then contacted by the expanding passenger side air bag and accelerated in a rearward rotational motion.

The child's head moved rearward compressing the foam padding against the shell of the safety seat. This contact sequence resulted in the following injuries: a large subgaleal hematoma and effusion over the right scalp; a 3 mm depressed fracture of the right parietal-occipital area; a closed head injury with neurologic deficit; and a contusion of the left frontal temporal area with a small subdural hematoma.

The child seat continued in a rearward trajectory and contacted the right front seat back support with the leading edge of the carry handle which was oriented in a vertical position above the child's chest prior to the crash. Contact with the seat back support by the child safety seat handle was evident by a 2.2 cm (0.9") linear horizontal abrasion mark in the fabric located 37.5 cm (14.8") above the seat and 10.2 cm (4.0") right of the seat back support centerline. The safety seat subsequently rebounded and came to rest on the right front seat cushion.

Driver #2

Driver #2 was restrained by the motorized automatic torso belt at the time of the crash. Her torso moved forward and to the left against the belt during the impact sequence. She was not injured.

ATTACHMENT A

Prints



1. View of the westbound pre-crash trajectory of the 1996 Saturn SLT (Vehicle #1) at 91 meters (300 ft.) prior to the point of impact (POI).



2. Pre-crash trajectory of Vehicle #1- 76 meters (250 ft.) prior to the POI.



3. Pre-crash trajectory of Vehicle #1- 61 meters (200 ft.) prior to the POI.



4. Pre-crash trajectory of Vehicle #1- 46 meters (150 ft.) prior to the POI.



5. Pre-crash trajectory of Vehicle #1- 30 meters (100 ft.) prior to the POI.



6. Pre-crash trajectory of Vehicle #1- 15 meters (50 ft.) prior to the POI.



7. Pre-crash trajectory of Vehicle #1 initiating the left turn.



8. View showing pre-impact skid marks from Vehicle #1. This view also highlights Vehicle #1's final rest position (FRP).



9. Reverse view of Vehicle #1's trajectory from beyond POI.



10. Lookback view of Vehicle #1 at 23 meters (75 ft.) from POI.



11. Lookback view of Vehicle #1 at 46 meters (150 ft.) from POI.



12. Lookback view of Vehicle #1 at 91 meters (300 ft.) from POI.



13. Eastbound pre-crash trajectory of the 1991 Mitsubishi Eclipse (Vehicle #2) at 91 meters (300 ft.) prior to the POI.



14. Pre-crash trajectory of Vehicle #2 - 76 meters (250 ft.) prior to the POI.



15. Pre-crash trajectory of Vehicle #2 - 61 meters (200 ft.) prior to the POI.



16. Pre-crash trajectory of Vehicle #2 - 46 meters (150 ft.) prior to the POI.



17. Pre-crash trajectory of Vehicle #2 - 30 meters (100 ft.) prior to the POI.



18. Pre-crash trajectory of Vehicle #2 - 15 meters (50 ft.) prior to the POI showing the crash avoidance path toward the right shoulder of the roadway.



19. Vehicle #2 trajectory on the southbound intersecting roadway just prior to the POI.



20. View of the POI.



21. Vehicle #2's post impact, off roadway trajectory.



22. Close-up view of Vehicle #2's tire scuff marks on the south grass shoulder.



23. Vehicle #2's post impact trajectory along the south shoulder of the roadway.



24. View of Vehicle #2's right front and right rear tire marks in the grass along the south shoulder.



25. View of Vehicle #2's trajectory heading back onto the roadway.



26. Vehicle #2's skid marks crossing the roadway toward the north shoulder.



27. View of the right front and left rear tire crossover marks as Vehicle #2 rotated counterclockwise.



28. View of the skid marks leaving the roadway onto the north shoulder.



29. Vehicle #2's trajectory on the north grass shoulder of the roadway.



30. View of Vehicle #2's FRP.



31. Lookback view of Vehicle #2's FRP.



32. Lookback view of Vehicle #2's post crash trajectory approximately 61 meters (200 ft.) from the POI.



33. Another lookback view of Vehicle #2's post crash trajectory taken on the eastbound travel lane.



34. Lookback view of Vehicle #2's trajectory from the POI.



35. Lookback view at 46 meters (150 ft.) from POI.



36. Lookback view at 91 meters (300 ft.) from POI.



37. Overall view of the 1996 Saturn SLT's frontal plane.



38. View of the left frontal plane.



39. Close-up view of the left side bumper reinforcement bar.



40. Left front corner view of Vehicle #1.



41. View of the driver contact evidence on the windshield.

42. Lateral view showing rearward displacement of the left front corner.





43. Lateral view of the left front fender of Vehicle #1.



44. Close-up view of the left front corner.



45. View of the left side plane.



46. Left rear corner view.



47. Right rear corner view.



48. View of the right side plane.



49. Right front corner view.

50. Lateral view from the right side showing no visible damage.





51. Lateral view from the left side showing the position of the front seats and both deployed air bags.



52. Angular view of the driver's side windshield, instrument panel and air bag module showing contact evidence.



53. View of the driver's seat with yellow tape marking the location of an abraded surface on the lap belt.



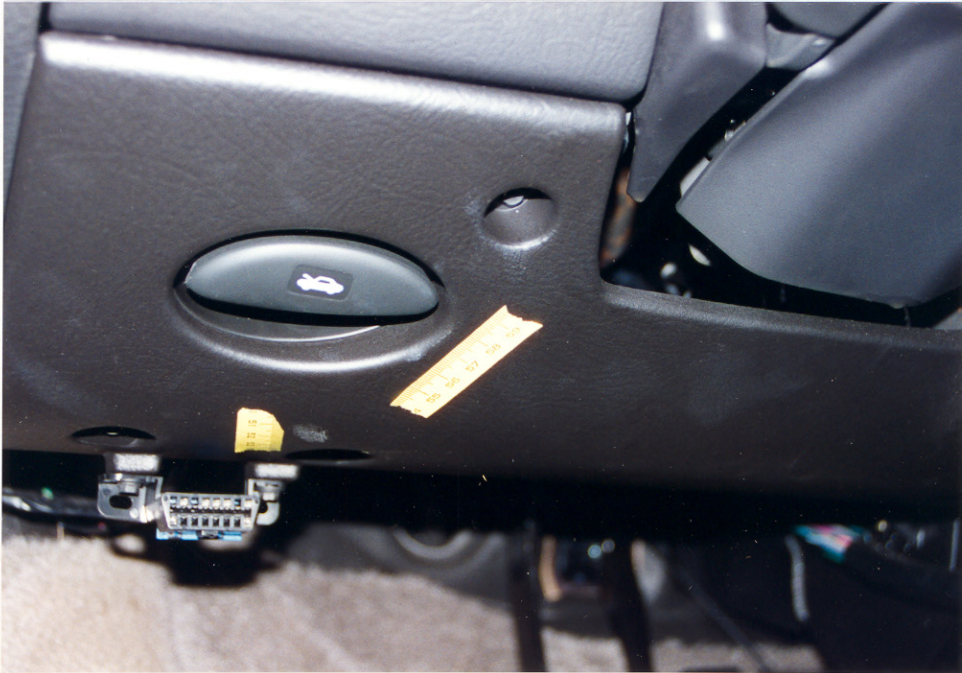
54. View of the left side instrument panel showing location of driver contact evidence.



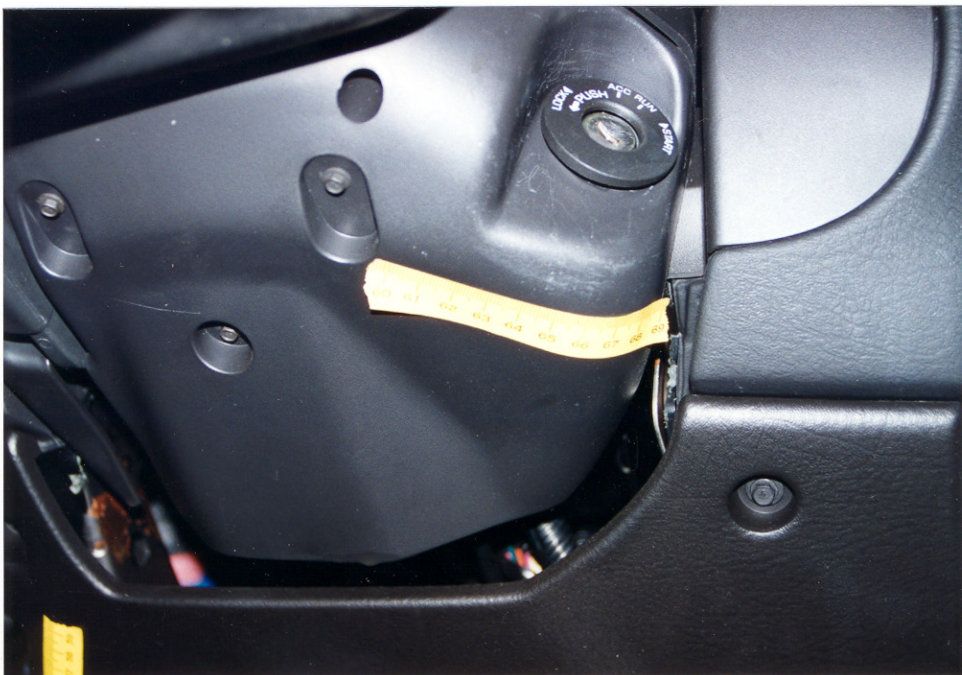
55. Close-up view of a scuff mark on the left side of the instrument panel eyebrow.



56. Close-up view of a scuff mark on the right side of the instrument panel eyebrow.



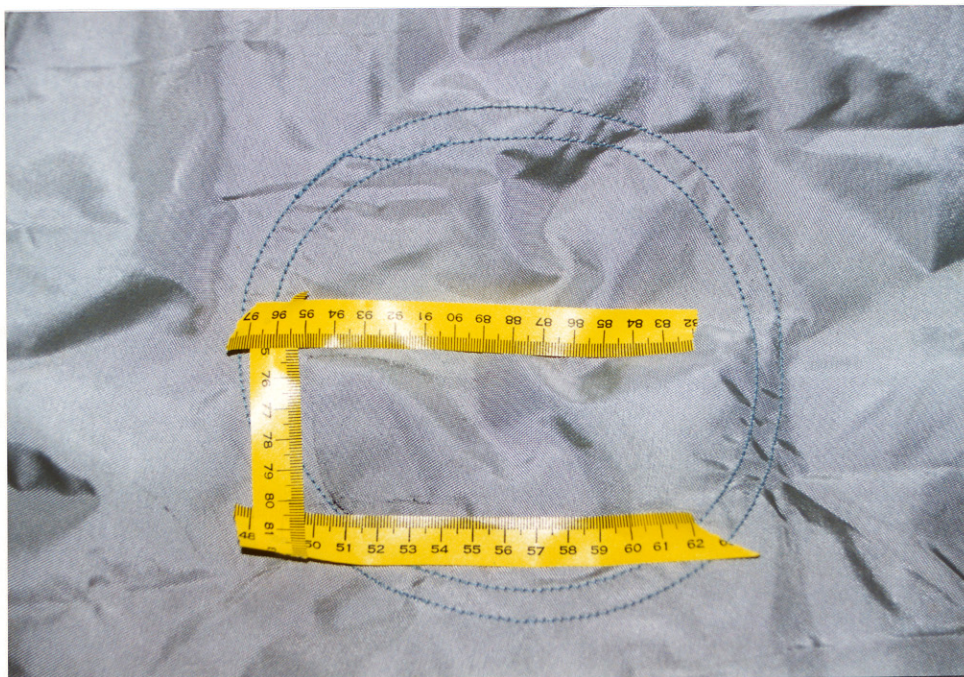
57. Close-up view of scuff marks on the left knee bolster.



58. Close-up view of scuff marks located on the right side of the steering column.



59. Vertical view of the driver side air bag, windshield, and sunvisor.



60. Close-up view of the driver side air bag showing the location of black striated transfers.



61. Close-up view of a small spider web glazing crack located at the upper left corner of the windshield.



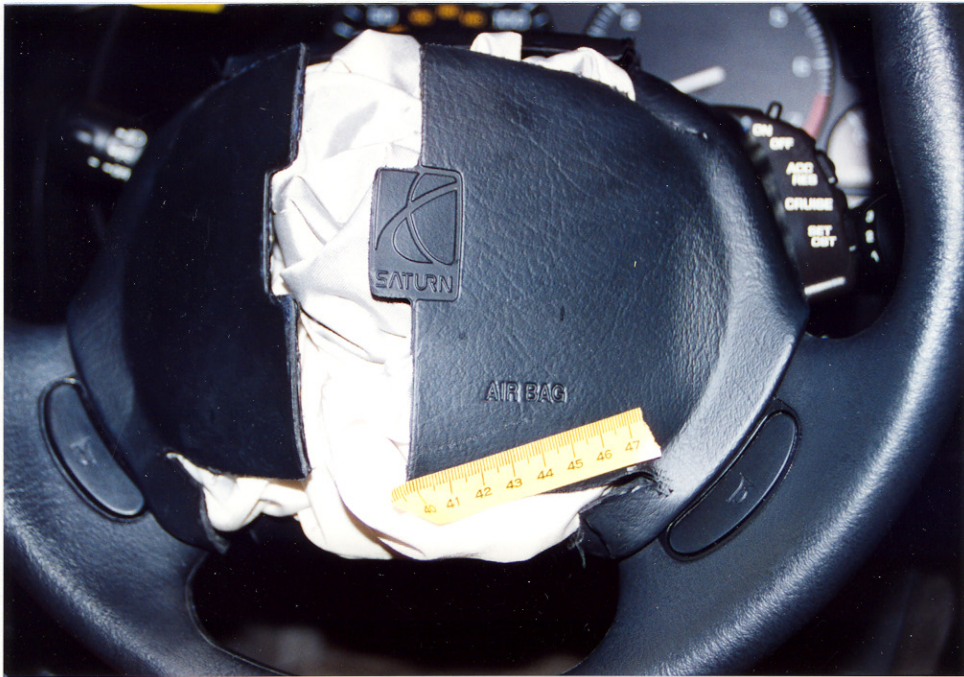
62. Close-up view of another glazing crack on the windshield located 15.9 cm (6.3") right of the crack shown in photograph #61.



63. View of the driver's side sunvisor in the "up" position.



64. View of the air bag warning label located on the roof side of the left sunvisor.



65. Close-up view of the driver side air bag module right cover flap showing a scratch mark near the bottom edge.



66. Lateral view of the steering wheel rim showing no deformation.

BEST AVAILABLE



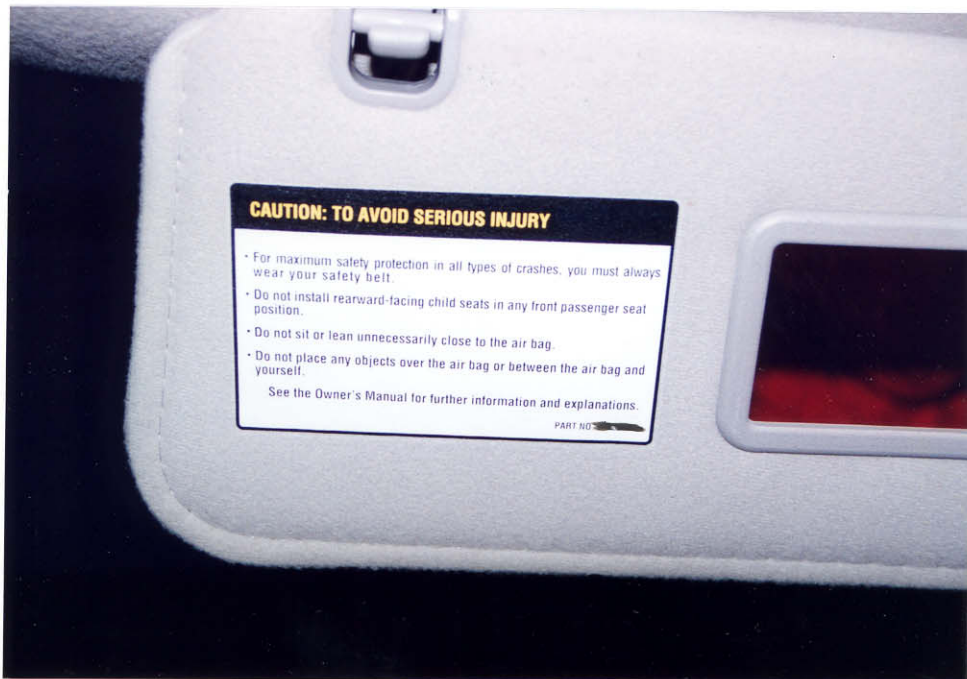
67. Vertical view of the center instrument panel and center console.

68. Vertical view of the right front passenger area showing the passenger side air bag in an extended position, air bag module cover, instrument panel, and windshield.





69. Close-up view of the air bag information label on the right sunvisor visible when the sunvisor is in the "up" position.



70. Air bag warning label on the roof side of the right sunvisor.



71. Passenger side air bag module flap showing several horizontal scuffs and scratches.



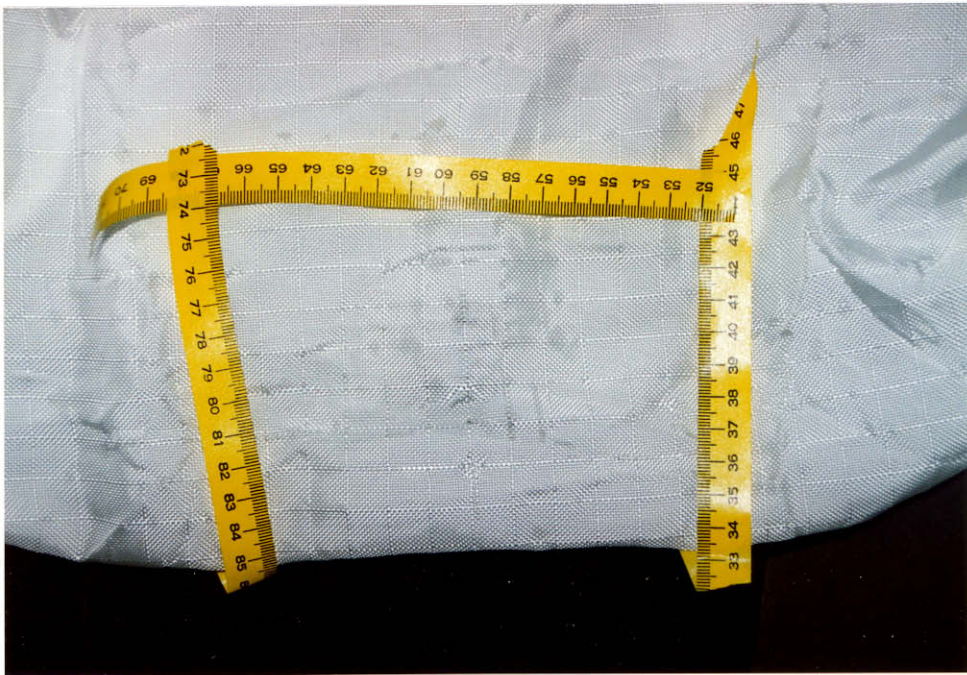
72. Passenger side air bag module flap showing scuffs along the lower edge consistent with the hand grip of the infant safety seat.



73. View of the air bag module flap in relation to the upper back surface of the rear-facing infant safety seat.



74. View of the passenger side air bag extended into the right front passenger seating area.



75. Close-up view of the black striated marks on the face of the passenger side air bag.



76. Angular view of the front seat area showing the instrument panel, windshield, and both air bags.



77. Close-up view of the glove compartment door showing several scuff marks.



78. Passenger side air bag identification label.



79. Lateral view from the left side showing the right front seat adjustment and the position of the infant safety seat at the time of the crash.



80. Lateral view showing the distance between the infant safety seat and the air bag module cover.



81. Close-up lateral view highlighting the distance between the infant safety seat and the air bag module cover.



82. Lateral view of the rear-facing infant safety seat secured by the lap belt in the right front passenger seat.

"GRAPHIC"

PHOTOGRAPHS and IMAGES

**Several vivid photographs have been removed for this case.
These photographs contain highly graphic material
which may be improper for the general audience.**

Photo #83 page A-42

**If you would like a copy of these photographs and/or images
please call or write to:**

**Marjorie Saccoccio at (617) 494-2640
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
55 Broadway
Cambridge, MA 02142**



84. Angular view of the infant safety seat secured in the right front passenger seat.



85. Vertical view of the right front passenger seat with the infant safety seat secured by the manual lap belt.



86. Lateral view from the right side of the rear-facing infant safety seat secured in the right front passenger seat.



87. Close-up lateral view from the right side of the air bag module and the upper rear surface of the infant safety seat.



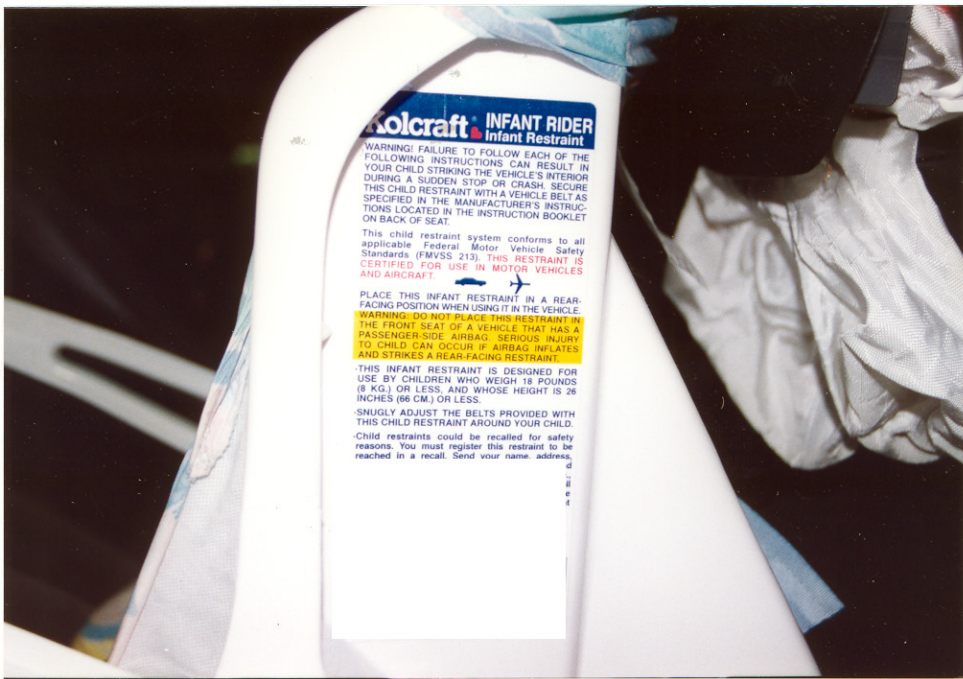
88. Close-up overhead view showing the relative position of the infant safety seat with the passenger side air bag module cover.



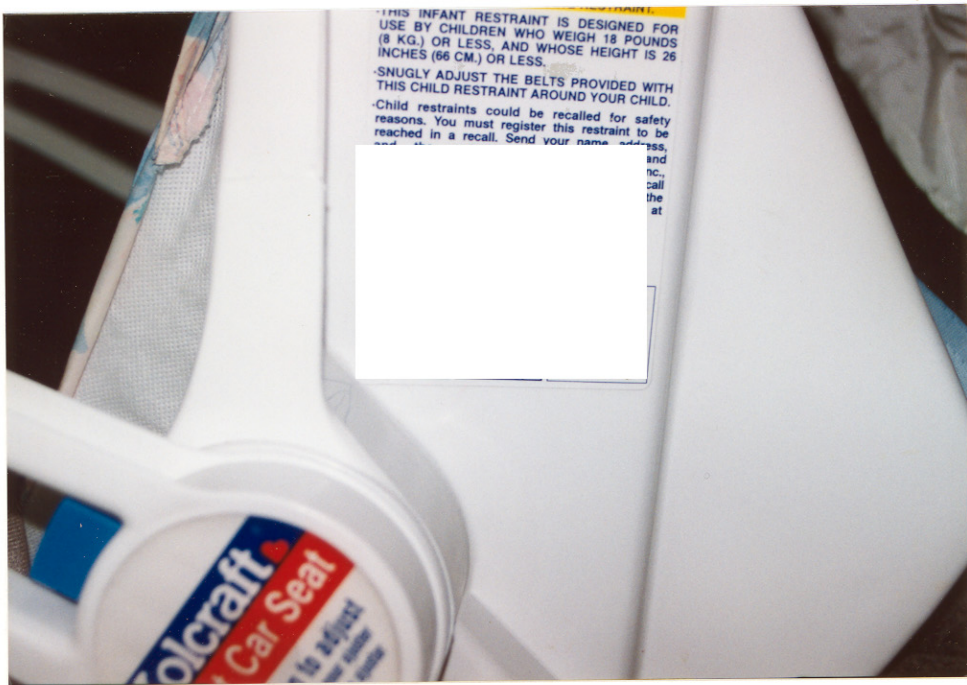
89. View showing the relative distance between the rear surface of the infant safety seat and the air bag module cover. This view was taken in an upward direction from the right side of the vehicle.



90. Close-up view of the yellow air bag warning label on the infant safety seat which was partially obscured by the seat cover.



91. Warnings and instructions label written in English text located on the left side of the infant safety seat back support.



92. Close-up view of the lower half of the infant safety seat label showing installation guidelines.

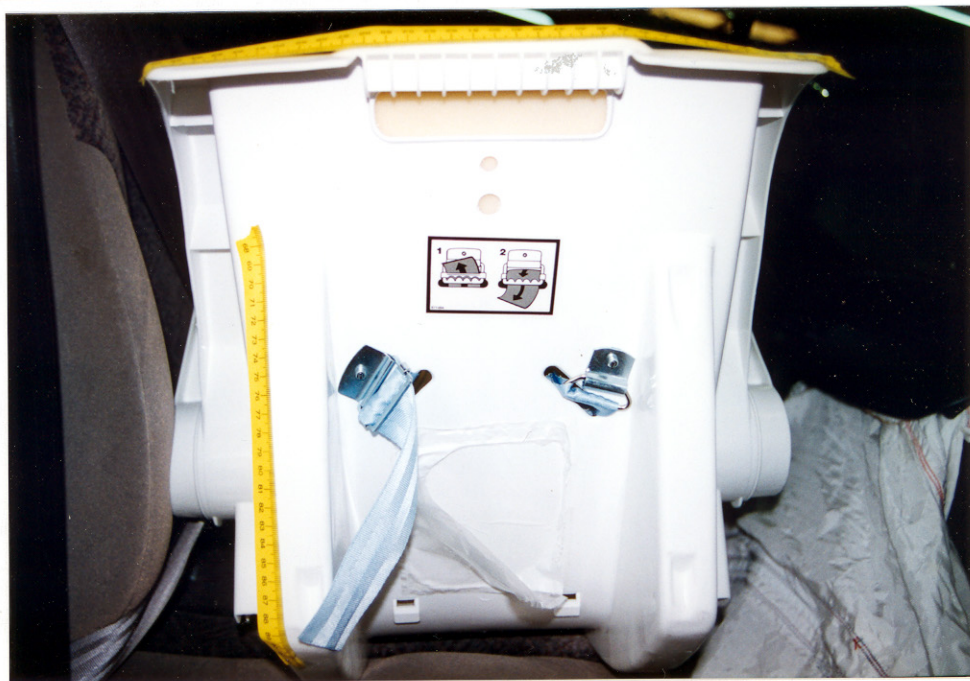
Labels on the container:

- Should Burns, Sales, contr, Arteta, atenc, con c
- Save a mano a - 700 - or with anteo solamente.
- Ilientes, Legamatos, orcas de, outa, Rama 0
- DATE OF DELIVERY: 1984-01-10
- 19

A-47



95. Close-up view of the scuff mark along the left rear surface of the infant safety seat back support.



96. View of the back of the infant safety seat with the fabric cover removed showing the fluted area which was consistent with the vertical scuff marks on the lower surface of the air bag module cover.



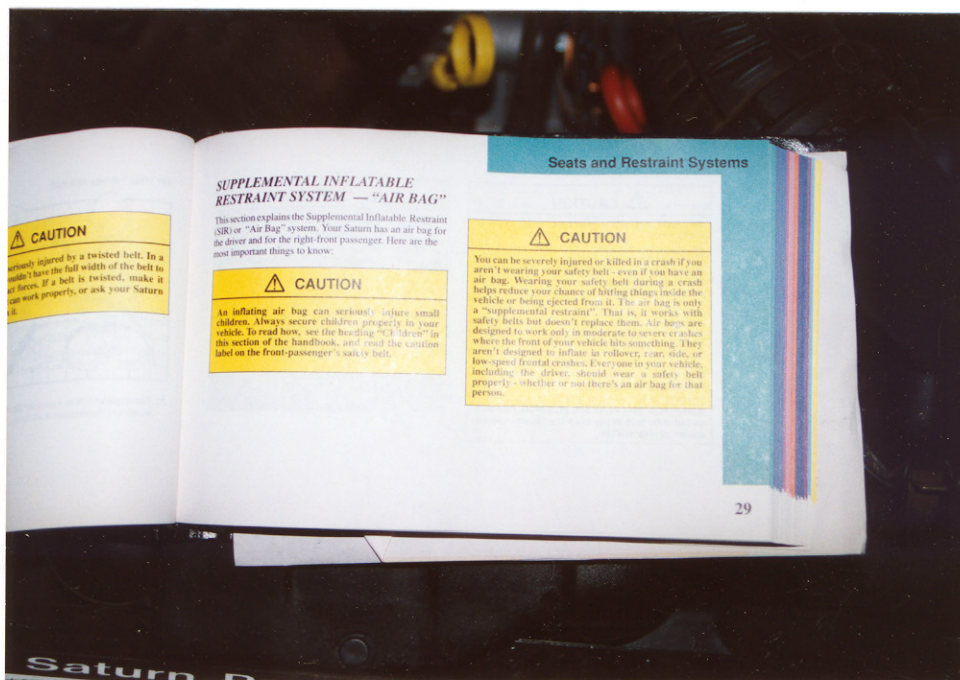
97. Close-up view of the uncovered upper back surface of the infant safety seat showing scuffing across the entire top edge.



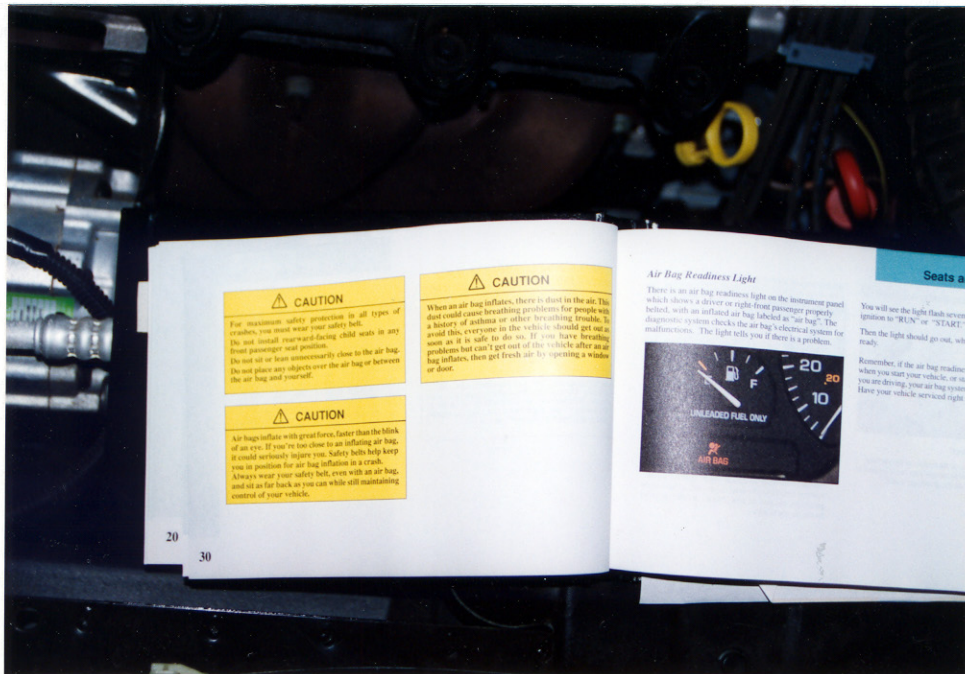
98. Overhead view of the infant safety seat with the seat back cushion folded forward to show the 19.1 mm (0.75") thick foam padding on the seat back.



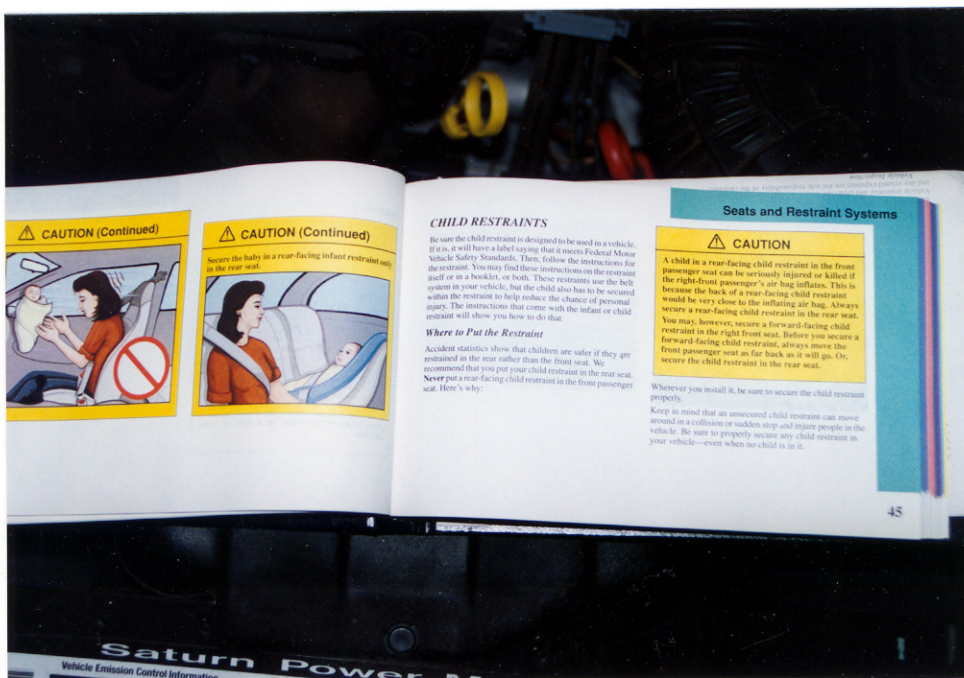
99. Close-up view of the foam padding.



100. Page #29 of the Saturn owner's manual with warnings regarding safety belt usage for children and all occupants of vehicles which have air bags.



101. Warning on page #30 of the Saturn owner's manual pertaining to the use of rear-facing infant safety seats in the front seat of a vehicle equipped with dual air bags.



102. Warning on page #45 of the Saturn owner's manual pertaining to the placement of rear-facing infant safety seat in the front seat of a vehicle equipped with dual air bags.



103. Lateral view from the right of the front passenger seated area showing the relative seat positions.



104. Lateral view from the right side of the right front passenger seat and showing the excursion of the passenger side air bag.



105. View of the right front passenger seat back support.

106. Close-up view of contact evidence by the infant safety seat on the right front passenger seat back support.





107. Close-up view of the warning label on the right front passenger lap belt.



108. Lateral view of the rear seats of Vehicle #1.



109. Overall view of the frontal plane of the 1991 Mitsubishi Eclipse (Vehicle #2).



110. Left front corner view of Vehicle #2 showing non-related crash damage to the lower air spoiler.



111. View of the left side plane of Vehicle #2.



112. View of the contact damage to the left front wheel, left front fender, and left side door.



113. Close-up view of the damage to the left front wheel.



114. Longitudinal view of the left side plane of Vehicle #2 taken from the rear showing lateral displacement.



115. Left rear corner view of Vehicle #2.



116. View of the right side plane of Vehicle #2.



117. View of the right front corner view showing the cracked lower air spoiler.



118. Angular view of the front seated area, instrument panel, and windshield of Vehicle #2.



119. Lateral view of the driver's seat showing the restraint belt in the operational mode.

Appendix B

SMASH Algorithm

Summary of Results Using Damage

SCI CA96-13

	Speed Change (Damage)	Speed Change (Linear Momentum and Spinout)	Impact Speed (Linear Momentum and Spinout)
Vehicle #1			
Total	10 km/h (6 mph)	9 km/h (6 mph)	9 km/h (5 mph)
Longitudinal	-9 km/h (-5 mph)	8 km/h (5 mph)	-9 km/h (-5 mph)
Latitudinal	-5 km/h (-3 mph)	4 km/h (2 mph)	0 km/h (0 mph)
PDOF Angle	30 ½	-154 ½	
Energy Dissipated	= 9728 Joules (7174 Ft-Lb)		
Barrier Equivalent Speed =	8.4 km/h (5.2 mph)		
Calculated using crush coefficients entered by the user.			

Vehicle #2			
Total	11 km/h (7 mph)	9 km/h (6 mph)	83 km/h (51 mph)
Longitudinal	-9 km/h (-6 mph)	8 km/h (5 mph)	83 km/h (51 mph)
Latitudinal	5 km/h (3 mph)	-5 km/h (-3 mph)	0 km/h (0 mph)
PDOF Angle	-30 ½	150 ½	
Energy Dissipated	= 11910 Joules (8784 Ft-Lb)		
Barrier Equivalent Speed =	13.9 km/h (8.6 mph)		
Calculated using crush coefficients entered by the user.			

Separation Results

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Separation (Using Spinout)		
us	-1 km/h (-0 mph)	91 km/h (57 mph)
vs	4 km/h (2 mph)	-5 km/h (-3 mph)
psisd	-89 deg/sec	-178 deg/sec
Relative Velocity (Linear Momentum)		
Speed along line through cg	-9 km/h (-5 mph)	38 km/h (24 mph)
Speed orthogonal to cg line	-1 km/h (-1 mph)	73 km/h (46 mph)
Closing Velocity (Linear Momentum) = 29 km/h (18 mph)		

General Information

	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Year	1996	1991
Make	Saturn	Mitsubishi
Model	SW2	Eclipse
CDC	01FLEE1	11LYES2
Side Damaged	F	L
PDOF Angle	30 ½	330 ½
Heading Angle	315 ½	191 ½

Calculation method:	Vehicle's Crush Coeff.	Vehicle's Crush Coeff.
d0 crush coeff.	102.20 sqrt(N)	63.32 sqrt(N)
d1 crush coeff.	7.25 sqrt(N)/cm	8.02 sqrt(N)/cm

Damage Information

	Vehicle #1 áááááááááááá Yes	Vehicle #2 áááááááááááá Yes
Vehicle Damage Known		
Crush Length	130.8 cm (51 in)	196.9 cm (78 in)
C1	9.1 cm (4 in)	1.3 cm (1 in)
C2	2.5 cm (1 in)	9.8 cm (4 in)
C3	0.5 cm (0 in)	5.7 cm (2 in)
C4	0.0 cm (0 in)	6.1 cm (2 in)
C5	0.0 cm (0 in)	4.4 cm (2 in)
C6	0.0 cm (0 in)	3.8 cm (1 in)
D	-42.4 cm (-17 in)	-0.2 cm (-0 in)
D'	-78.8 cm (-31 in)	-7.4 cm (-3 in)

Scene Information

Vehicle #1
ááááááááááááVehicle #2
áááááááááááá

Impact

x position 9.5 m (31.2 ft)
 y position 1.2 m (3.9 ft)
 heading angle 315 ½

11.8 m (38.7 ft)
 -1.7 m (-5.6 ft)
 191 ½

Rest

x position 9.8 m (32.2 ft)
 y position 1.5 m (4.8 ft)
 heading angle 299 ½

-55.4 m (-181.8 ft)
 6.5 m (21.3 ft)
 71 ½

Side-Slip Angle

0 ½

0 ½

Motion Information

Vehicle #1
ááááááááááááVehicle #2
áááááááááááá

Did Vehicle Rotate?

Yes

Yes

Did Rotation Stop?

No

No

End of Rotation x position

9.8 m (32.2 ft)

-55.4 m (-181.8 ft)

End of Rotation y position

1.5 m (4.8 ft)

6.5 m (21.3 ft)

End of Rotation angle

299.0 ½

71.0 ½

Curved Path?

No

No

Curved Path x position

0.0 m (0.0 ft)

0.0 m (0.0 ft)

Curved Path y position

0.0 m (0.0 ft)

0.0 m (0.0 ft)

Direction of Rotation

CCW

CCW

Amount of Rotation

< 360½

> 360½

Was There Sustained Contact Between the Vehicles? No

Friction Information

	Vehicle #1 ááááááááááá	Vehicle #2 ááááááááááá
Rolling Resistance		
Left Front Wheel	0.25	0.25
Right Front Wheel	0.25	0.25
Left Rear Wheel	0.01	0.01
Right Rear Wheel	0.01	0.01

Coefficient of Friction = 0.80

Vehicle Dimensions

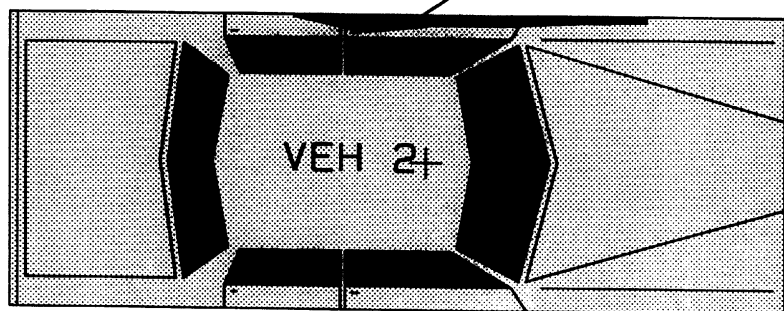
	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Length	449.1 cm (177 in)	433.1 cm (171 in)
Width	169.4 cm (67 in)	168.9 cm (66 in)
Wheelbase	260.1 cm (102 in)	246.9 cm (97 in)
Weight	1280 kgs (2822 lbs)	1202 kgs (2650 lbs)
CG to Front of Veh	228.1 cm (90 in)	211.6 cm (83 in)
Engine Displacement	1.9 liters	1.8 liters
Moment of Inertia	233132 kgs (20635 lbs)	203600 kgs (18021 lbs)
Vehicle Mass	1280 kgs (7.3 lb-s ² /in)	1202 kgs (6.9 lb-s ² /in)

Trajectory Simulation Results

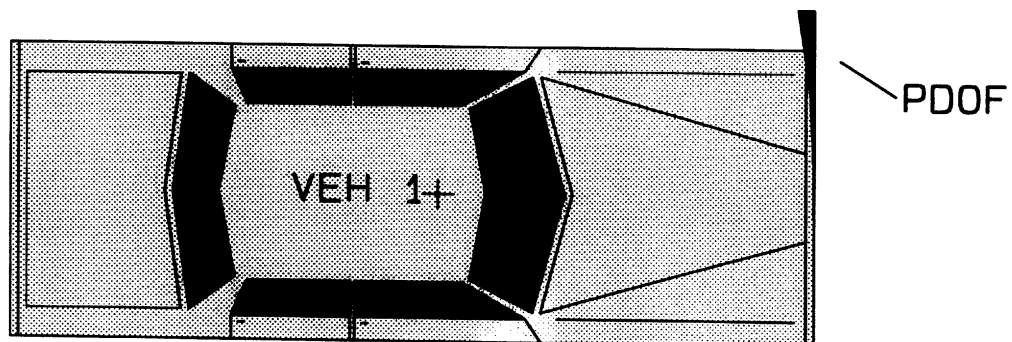
Simulation Time: 0.000 seconds Integration Step = 0.000 seconds

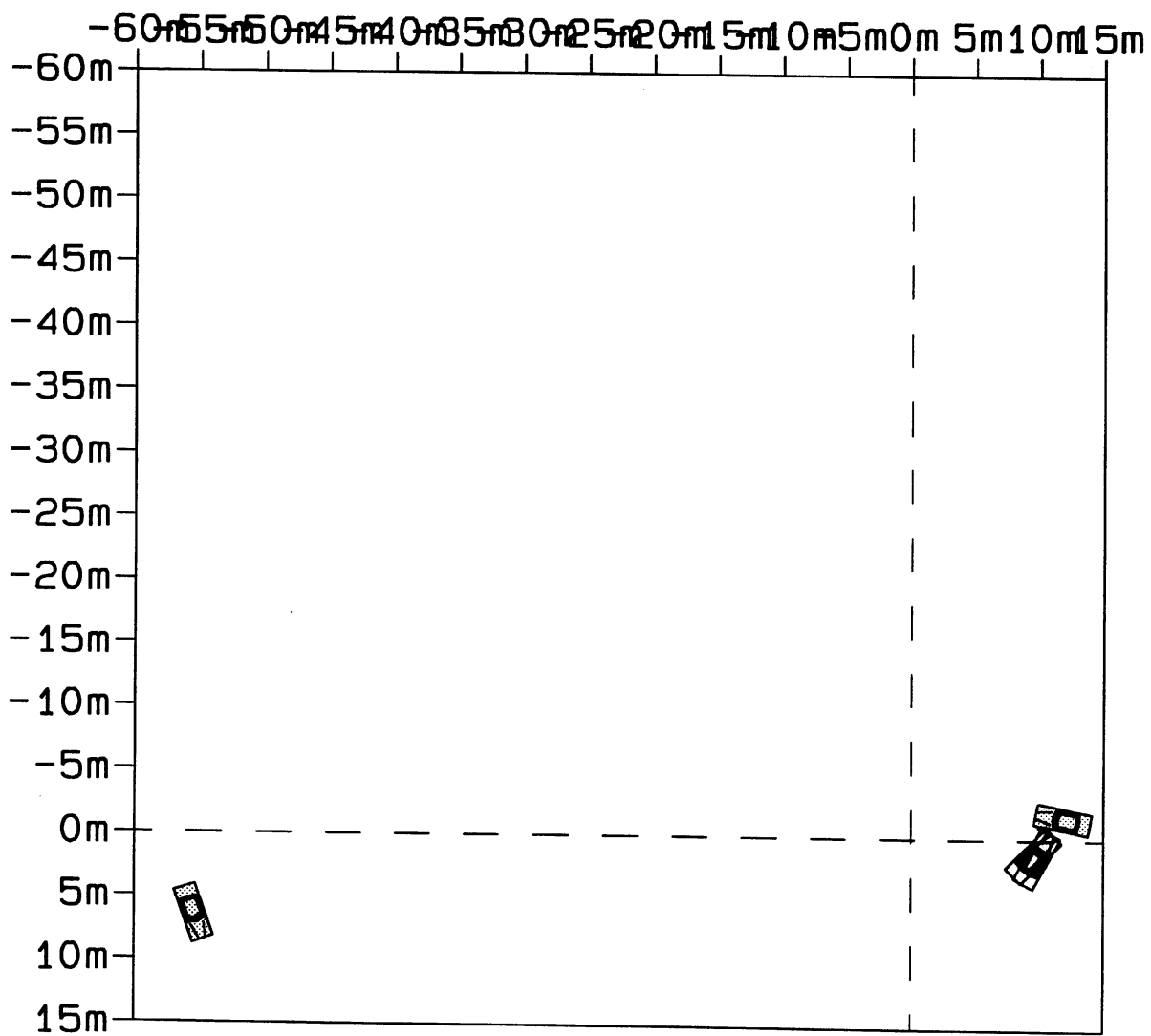
	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
No. of Iterations	0	0
Best Iteration	0	0
Error	0.000	0.000
Predicted Rest Positions		
x	0.0 m (0.0 ft)	0.0 m (0.0 ft)
y	0.0 m (0.0 ft)	0.0 m (0.0 ft)
angle	0.0 ½	0.0 ½
Scene Rest Positions		
x	9.8 m (32.2 ft)	-55.4 m (-181.8 ft)
y	1.5 m (4.8 ft)	6.5 m (21.3 ft)
angle	299.0 ½	71.0 ½
Residual Velocity		
Linear	0 km/h (0 mph)	0 km/h (0 mph)
Angular	0.00 deg/sec	0.00 deg/sec

1991 Mitsubishi Eclipse



1996 Saturn SW2





AIR BAG ACCIDENT LEVEL FORM

BEST AVAILABLE

LOG NUMBER

CA 9613

ACCIDENT DATE

MONTH

YEAR

09
96

INVESTIGATING TEAM:

Calspan Corp

FLEET VEHICLE

- 1 - 72 MERCURY, 73 CHEVROLET OR VOLVO
- 2 - PRIVATE OWNER
- 3 - INSURANCE FLEET
- 4 - GSA FLEET
- 5 - POLICE FLEET
- 6 - OTHER CORPORATE/PRIVATE FLEET

2

DID AIR BAG CAR REQUIRE TOWING?

Y - YES

N - NO

Y

DID AIR BAG DEPLOY?

Y - YES

N - NO

I - INADVERTENT

Y

VEHICLE

MODEL YEAR

MANUFACTURER

MODEL

Saturn
Station wagon SW2

CODE

CODE

96
24
003

CDC

RANKED BY SEVERITY

EVENT #

DEPLOY (Y/N)

- 1. 01 FLEET
- 2. _____
- 3. _____

1

Y

HIGHEST AIS IN AIR BAG VEHICLE

4

DELTA V OF PRINCIPLE DAMAGE TO AIR BAG VEHICLE

106/h

OBJECT STRUCK BY AIR BAG VEHICLE

veh #2

DRIVER AGE IN AIR BAG VEHICLE

026

NUMBER OF FRONT SEAT OCCUPANTS IN AIR BAG VEHICLE

02

NUMBER OF BELTED FRONT SEAT OCCUPANTS IN AIR BAG VEHICLE

02

TYPE OF INVESTIGATION

R - REMOTE

S - ON-SITE

S

AIR BAG OCCUPANT LEVEL FORM

BEST AVAILABLE

LOG NUMBER

0A 9613

OCCUPANT NUMBER (assign by seating position)

11

OCCUPANTS AGE

026

SEATING POSITION

1 - LEFT

2 - CENTER 1 (first person in center =2)

3 - CENTER 2

4 - RIGHT

1

SEATING ROW

F - FRONT

B - BACK

+

OCCUPANT FATAL

Y - YES

N - NO

N

INJURY

ISS REG	BDY REG	ASP	OIC LES	SYS/ ORG	AIS	INJURY SOURCE	DIRECT/ INDIRECT	DATA SOURCE
— 1.	<u>W</u>	<u>L</u>	<u>S</u>	<u>J</u>	<u>+</u>	<u>001</u>	<u>+</u>	<u>07</u>
— 2.	<u>W</u>	<u>L</u>	<u>L</u>	<u>I</u>	<u>+</u>	<u>001</u>	<u>+</u>	<u>07</u>
— 3.	<u>R</u>	<u>L</u>	<u>A</u>	<u>I</u>	<u>+</u>	<u>170</u>	<u>+</u>	<u>07</u>
— 4.	<u>R</u>	<u>L</u>	<u>C</u>	<u>I</u>	<u>+</u>	<u>170</u>	<u>+</u>	<u>07</u>
— 5.	<u>R</u>	<u>R</u>	<u>C</u>	<u>I</u>	<u>+</u>	<u>170</u>	<u>+</u>	<u>07</u>
— 6.	<u>M</u>	<u>W</u>	<u>C</u>	<u>I</u>	<u>+</u>	<u>152</u>	<u>+</u>	<u>07</u>
— 7.	<u>M</u>	<u>W</u>	<u>A</u>	<u>I</u>	<u>+</u>	<u>152</u>	<u>+</u>	<u>07</u>
— 8.	<u>C</u>	<u>W</u>	<u>C</u>	<u>I</u>	<u>+</u>	<u>152</u>	<u>+</u>	<u>07</u>
— 9.	—	—	—	—	—	—	—	—
— 10.	—	—	—	—	—	—	—	—
— 11.	—	—	—	—	—	—	—	—
— 12.	—	—	—	—	—	—	—	—

(If no injuries, enter 0 for the first AIS and leave the rest of the OIC's blank)

AIR BAG OCCUPANT LEVEL FORM

BEST AVAILABLE

LOG NUMBER

CA 9613

OCCUPANT NUMBER (assign by seating position)

13

OCCUPANTS AGE

5 months old

000

SEATING POSITION

- 1 - LEFT
- 2 - CENTER 1 (first person in center =2)
- 3 - CENTER 2
- 4 - RIGHT

4

SEATING ROW

- F - FRONT
- B - BACK

F

OCCUPANT FATAL

- Y - YES
- N - NO

N

INJURY

ISS REG	BDY REG	ASP	OIC LES	SYS/ ORG	AIS	INJURY SOURCE	DIRECT/ INDIRECT	DATA SOURCE
— 1.	<u>H</u>	<u>R</u>	<u>F</u>	<u>S</u>	<u>3</u>	<u>180</u>	<u>1</u>	<u>02</u>
— 2.	<u>H</u>	<u>L</u>	<u>C</u>	<u>B</u>	<u>3</u>	<u>180</u>	<u>1</u>	<u>02</u>
— 3.	<u>H</u>	<u>L</u>	<u>U</u>	<u>B</u>	<u>4</u>	<u>180</u>	<u>1</u>	<u>02</u>
— 4.	<u>H</u>	<u>R</u>	<u>C</u>	<u>H</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>02</u>
— 5.	<u>H</u>	<u>U</u>	<u>U</u>	<u>B</u>	<u>3</u>	<u>180</u>	<u>1</u>	<u>02</u>
— 6.	—	—	—	—	—	—	—	—
— 7.	—	—	—	—	—	—	—	—
— 8.	—	—	—	—	—	—	—	—
— 9.	—	—	—	—	—	—	—	—
— 10.	—	—	—	—	—	—	—	—
— 11.	—	—	—	—	—	—	—	—
— 12.	—	—	—	—	—	—	—	—

(If no injuries, enter 0 for the first AIS and leave the rest of the OIC's blank)



GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-13

3. Vehicle Number 01

VEHICLE IDENTIFICATION

4. Vehicle Model-Year 96
Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify): 24
Saturn

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify): 003
Wagon SWZ

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type 06

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

1G8ZK8278T2 (Small # omitted)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

11. Police Reported Travel Speed 999
Code to the nearest kmph (NOTE: 000 means
less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

 mph X 1.6093 = kmph

12. Speed Limit 689

(000) No statutory limit

Code posted or statutory speed limit in kmph

(999) Unknown

 mph X 1.6093 = kmph

13. Police Reported Alcohol Presence For Driver 9

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver 96

Code actual value (decimal implied

before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source:

15. Police Reported Other Drug Presence For Driver 9

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver 0

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin 1

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 2

- (0) Non-interchange area and non-junction
(1) Interchange area related

Non-Interchange junctions

- (2) Intersection related
(3) Driveway, alley access related
(4) Other junction (specify) _____

(5) Unknown type of junction _____

(9) Unknown

20. Trafficway Flow 0

- (0) Not physically divided (two way traffic)
(1) Divided trafficway-median strip without positive barrier
(2) Divided trafficway-median strip with positive barrier
(3) One way traffic
(9) Unknown

21. Number Of Travel Lanes 2

- (1) One
(2) Two
(3) Three
(4) Four
(5) Five
(6) Six
(7) Seven or more
(9) Unknown

22. Roadway Alignment 1

- (1) Straight
(2) Curve right
(3) Curve left
(9) Unknown

23. Roadway Profile 1

- (1) Level
(2) Uphill grade (> 2%)
(3) Hill crest
(4) Downhill grade (> 2%)
(5) Sag
(9) Unknown

24. Roadway Surface Type 2

- (1) Concrete
(2) Bituminous (asphalt)
(3) Brick or block
(4) Slag, gravel, or stone
(5) Dirt
(8) Other (specify): _____
(9) Unknown

25. Roadway Surface Condition 1

- (1) Dry
(2) Wet
(3) Snow or slush
(4) Ice
(5) Sand, dirt, or oil
(8) Other (specify): _____
(9) Unknown

26. Light Conditions 5

- (1) Daylight
(2) Dark
(3) Dark, but lighted
(4) Dawn
(5) Dusk
(9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions
(1) Rain
(2) Sleet/hail
(3) Snow
(4) Fog
(5) Rain and fog
(6) Sleet and fog
(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
(9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)
(1) Traffic control signal (not RR crossing)

Regulatory

- (2) Stop sign
(3) Yield sign
(4) School zone sign
(5) Other regulatory sign (specify): _____

(6) Warning sign (not RR crossing) _____

- (7) Unknown sign
(8) Miscellaneous/other controls including RR controls (specify): _____

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device
(1) Traffic control device not functioning (specify): _____
(2) Traffic control device functioning properly
(9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 0 2
- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- Distractions*
- (03) By other occupant(s), (specify): _____
- (04) By moving object in vehicle (specify): _____
- (05) While talking or listening to cellular phone (specify location and type of phone): _____
- (06) While dialing cellular phone (specify location and type of phone): _____
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): _____
- (09) While using other device/controls integral to vehicle (specify): _____
- (10) While using or reaching for device/object brought into vehicle (specify): _____
- (11) Sleepy or fell asleep
- (12) Distracted by outside person, object, or event (specify): _____
- (13) Eating or drinking
- (14) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): _____
- (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 0 1
- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): _____
- (99) Unknown

32. Critical Precrash Event 1 0
- THIS VEHICLE LOSS OF CONTROL DUE TO:**
- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

THIS VEHICLE TRAVELLING

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

33. Attempted Avoidance Maneuver 03

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 2

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 68

(Note: Applicable codes on back of this page)

(00) No impact

Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
38. Number of Occupants This Vehicle 02
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
39. Number of Occupant Forms Submitted 02

AIR BAG RELATED

40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1140
 _____ Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

44. Vehicle Cargo Weight 0000
 _____ Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

ROLLOVER DATA

45. Rollover 02
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 02
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type (specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
48. Rollover Initiation Object Contacted 02
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

VERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (1) 1st CDC
- (2) 2nd CDC
- (3) Other not automated CDC (specify): _____

*Underride (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (4) 1st CDC
- (5) 2nd CDC
- (6) Other not automated CDC (specify): _____

- (7) Medium/heavy truck or bus override (of any configuration)
- (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value

(996) Non-horizontal impact

(997) Noncollision

(998) Impact with object

(999) Unknown

53. Heading Angle For This Vehicle 315
54. Heading Angle For Other Vehicle 191

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
- (0) No towed unit
- (1) Yes—towed trailing unit
- (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
- (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted <45 degrees
- (4) Tilted ≥45 degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify): _____
- (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 02

(00) No vehicle inspection

Delta V Calculated

- (01) Reconstruction program-damage only routine
- (02) Reconstruction program-damage and trajectory routine
- (03) Missing vehicle algorithm

Delta V Not Calculated

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

- (05) Rollover
- (06) Other non-horizontal forces
- (07) Sideswipe type damage
- (08) Severe override
- (09) Yielding object
- (10) Overlapping damage
- (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): _____

(98) Other, (specify): _____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V Highest010

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of Delta V Highest+ 0009

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than
-0.5 kmph and less than +0.5 kmph)

(+160) ±159.5 kmph and above

(_999) Unknown

61. Lateral Component of Delta V Highest+ 0005

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than -0.5 kmph and
less than +0.5 kmph)

(+160) ±159.5 kmph and above

(_999) Unknown

62. Energy Absorption Highest9700

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed Highest009

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program
Results (For Highest Delta V)3

(0) No reconstruction

(1) Collision fits model — results appear
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear
reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed Highest008

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

ESTIMATED DELTA V	INSPECTION TYPE
<p>66. Estimated Highest Delta V (Researcher Determined) <u>0</u></p> <p>(0) Reconstruction Delta V coded</p> <p><i>Estimated Delta V</i></p> <p>(1) Less than 10 kmph</p> <p>(2) ≥ 10 kmph but < 25 kmph</p> <p>(3) ≥ 25 kmph but < 40 kmph</p> <p>(4) ≥ 40 kmph but < 55 kmph</p> <p>(5) ≥ 55 kmph</p> <p><i>Other estimates of damage severity</i></p> <p>(6) Minor</p> <p>(7) Moderate</p> <p>(8) Severe</p> <p>(9) Unknown</p>	<p>67. Type of Vehicle Inspection <u>3</u></p> <p>(0) No inspection</p> <p>(1) Vehicle fully repaired-no damage evident</p> <p>(2) Partial inspection (specify): _____</p> <p>(3) Complete inspection _____</p> <p>DELTA V EVENT NUMBER</p> <p>68. Delta V Event Number <u>1</u></p> <p>_____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle</p> <p>(99) Unknown</p>

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

Administration		CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	<u> </u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>96-13</u>		

VEHICLE IDENTIFICATION

VIN 1G8ZK8278TZ Model Year 96
Vehicle Make (specify): Saturn Wagon Vehicle Model (specify): 4Dr Wagon
Main Date 6/9/16

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	15' @ of E	measured along entire frontal plane	LF bumper corner

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

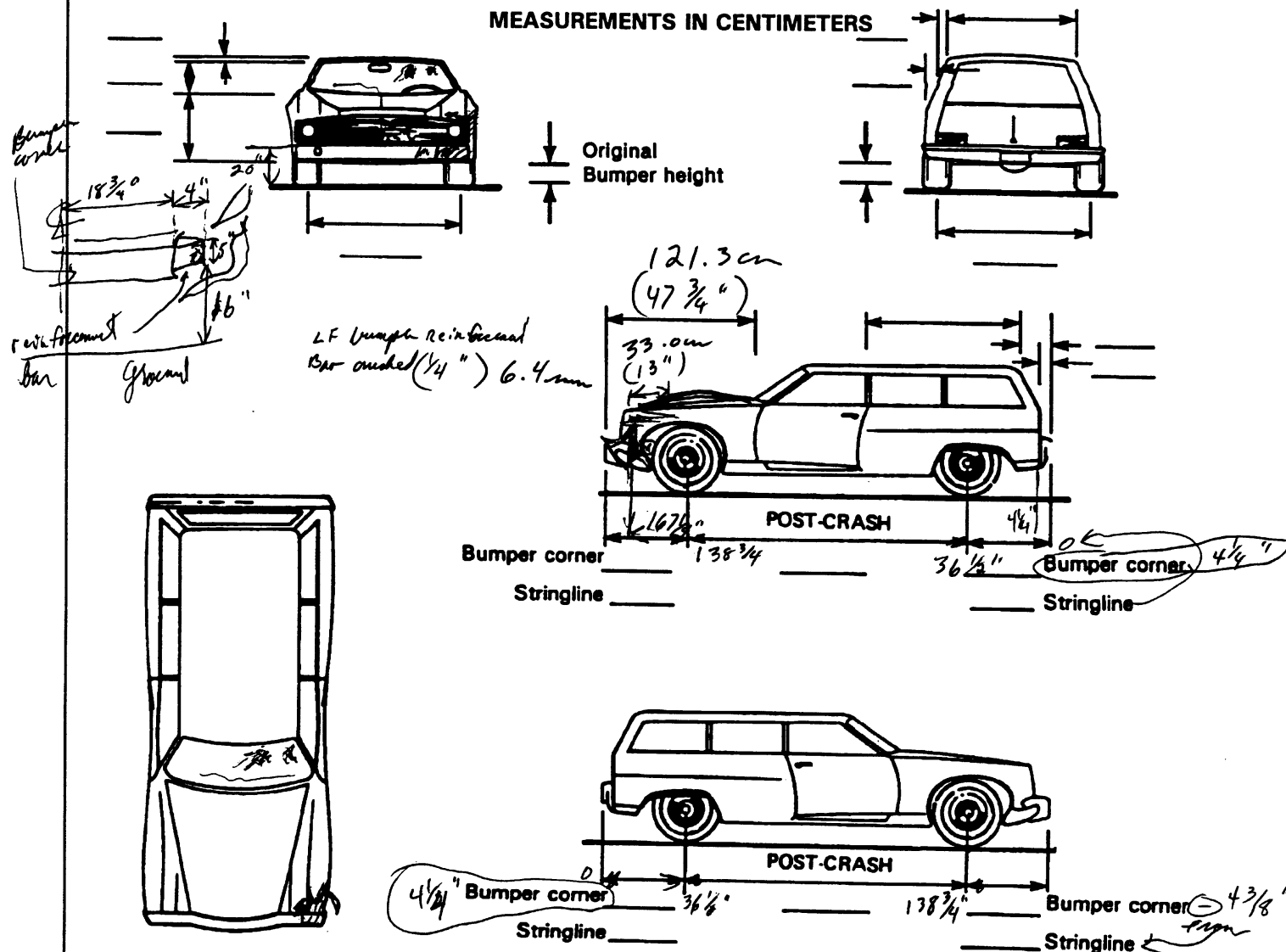
Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF <input checked="" type="checkbox"/> LF <input checked="" type="checkbox"/> RR <input checked="" type="checkbox"/> LR <input checked="" type="checkbox"/> b. Tire deflated RF <input checked="" type="checkbox"/> LF <input checked="" type="checkbox"/> RR <input checked="" type="checkbox"/> LR <input checked="" type="checkbox"/> (1) Yes (2) No (8) NA (9) Unk.	ORIGINAL SPECIFICATIONS Wheelbase <u>260.1</u> cm Overall Length <u>449.1</u> cm Maximum Width <u>169.4</u> cm Curb Weight <u>1137.2</u> kg Average Track <u>143.3</u> cm Front Overhang <u>96.3</u> cm Rear Overhang <u>92.7</u> cm Undeformed End Width <u>(25 3/4 31 1/2)</u> cm Engine Size: cyl./displ. <u>1.9</u> L	WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF ± <u> </u> ° LF ± <u> </u> ° RR ± <u> </u> ° LR ± <u> </u> ° Within ± 5 degrees
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight <u> </u> kg	

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OBJECT CONTACTED

(99) Unknown event or object

[illegible]

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>01</u>	7. <u>F</u>	8. <u>L</u>	9. <u>E</u>	10. <u>E</u>	11. <u>01</u>

Second Highest Delta "V"

12. <u> </u>	13. <u> </u>	14. <u> </u>	15. <u> </u>	16. <u> </u>	17. <u> </u>	18. <u> </u>	19. <u> </u>
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>± D</u>
<u>131</u>	<u>009</u>	<u>003</u>	<u>001</u>	<u>000</u>	<u>000</u>	<u>000</u>	<u>+ 0043</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>± D</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

131

27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

031

28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

— inches X 2.54 = — centimeters

260

29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

— inches X 2.54 = — centimeters

143

30. Are CDCs Documented
but Not Coded on The
Automated File?

- (0) No
(1) Yes

0

31. Researcher's Assessment of Vehicle
Disposition

- (0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

0

32. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

0

(Include photograph of CERTIFICATION
PLACARD in case report)

- (9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

0

34. Origin of Fire

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

0

- (9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap

2

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle)
on left side plane
(3) Aft of center of the rear wheels (rear axle)
on right side plane
(4) Forward of center of the rear wheels (rear
axle) on left side plane
(5) Forward of center of the rear wheels (rear
axle) on right side plane
(6) Over the center of the rear wheels (rear
axle) on left side plane
(7) Over the center of the rear wheels (rear
axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1

2

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1

4

40. Location of Fuel Tank-2

0

- (0) No fuel tank
(1) Aft of center of the rear wheels (rear axle)
centered
(2) Aft of center of the rear wheels (rear axle)
left side
(3) Aft of center of the rear wheels (rear axle)
right side
(4) Forward of center of the rear wheels (rear
axle) centered
(5) Forward of center of the rear wheels (rear
axle) left side
(6) Forward of center of the rear wheels (rear
axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

2

- (0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-13

3. Vehicle Number 01

INTEGRITY

4. Passenger Compartment Integrity 02

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 1

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 1 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2

20. BL 2 21. Roof 0 22. Other 2

(0) No glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted (original)

(4) AS-2 - Tempered-with after market tint

(5) AS-3 - Tempered-tinted (with additional after market tint)

(6) AS-14 - Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2

28. BL 1 29. Roof 0 30. Other 1

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 2 32. LF 1 33. RF 1 34. LR 1 35. RR 1

36. BL 1 37. Roof 0 38. Other 1

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 3 40. LF 1 41. RF 1 42. LR 1 43. RR 1

44. BL 1 45. Roof 0 46. Other 1

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by occupant contact

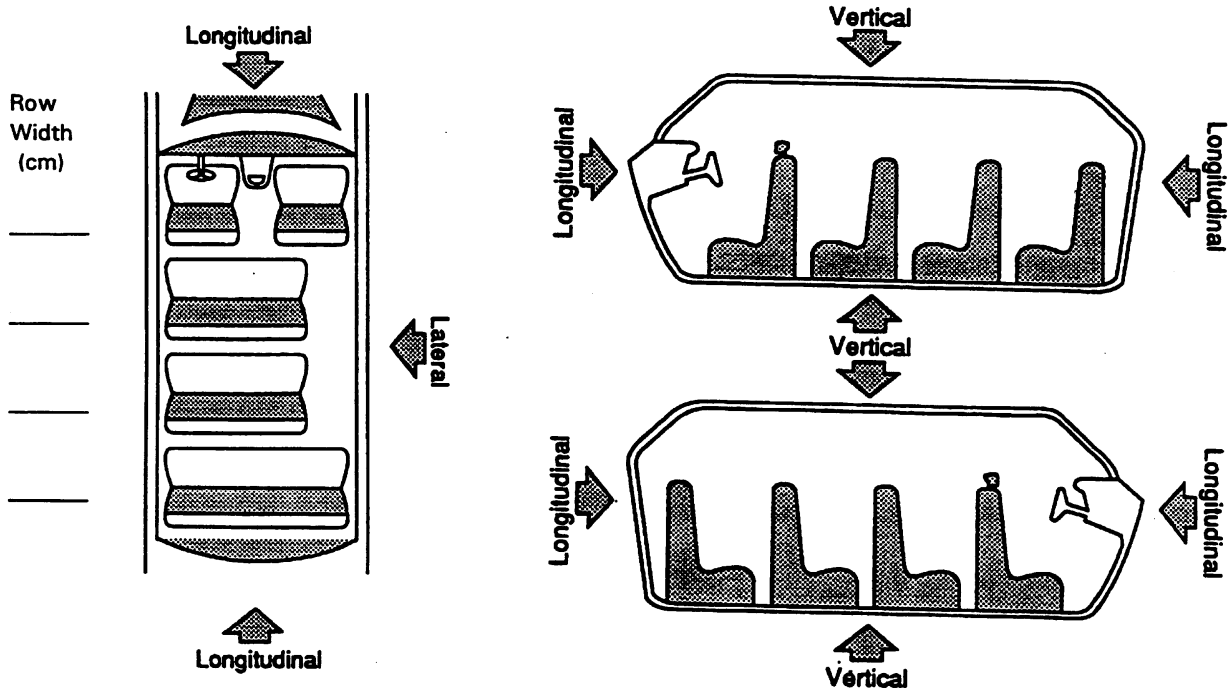
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	
		—		=	

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

Third Seat

- (31) Left
- (32) Middle
- (33) Right

Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____

(99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>No Intrusion</u>	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
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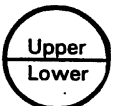
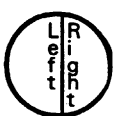
	—		=	
--	---	--	---	--

	—		=	
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	—		=	
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	—		=	
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STEERING COLUMN

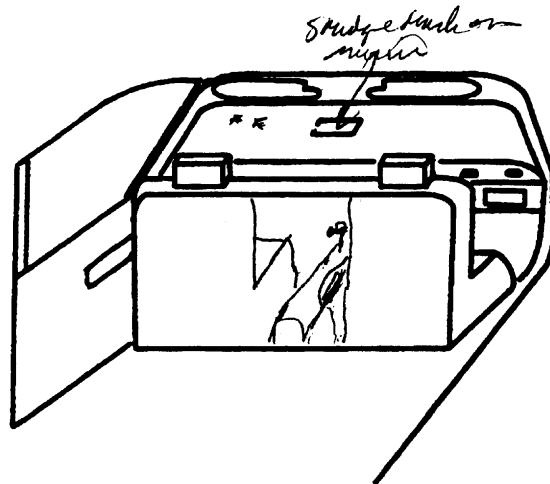
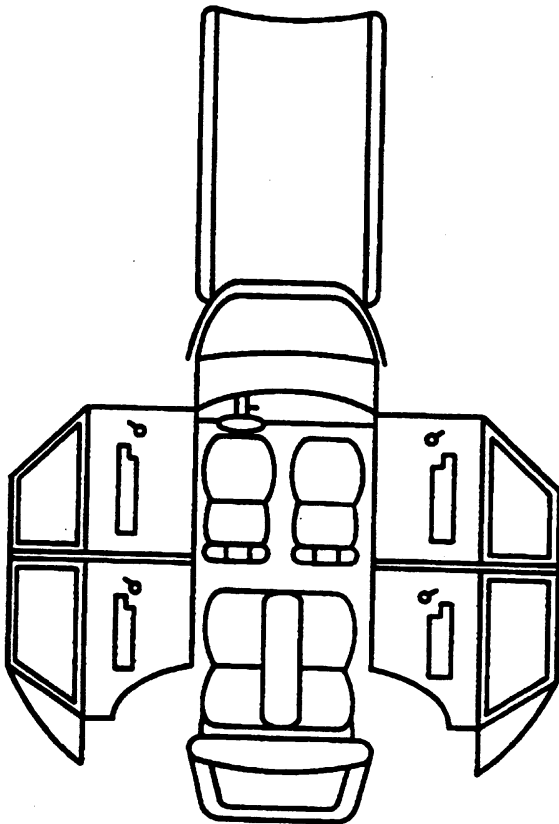
87. Steering Column Type 2
 (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____
 (9) Unknown
88. Tilt Steering Column Adjustment 3
 (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown
89. Telescoping Steering Column Adjustment 0
 (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown
90. Steering Rim/Spoke Deformation 00
 Code actual measured
 deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown
91. Location of Steering Rim/Spoke Deformation 00
 Deformation
 (00) No steering rim deformation
- Quarter Sections**
 (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D
- Half Sections**
 (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke
 (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown
- 
- 
- 

INSTRUMENT PANEL

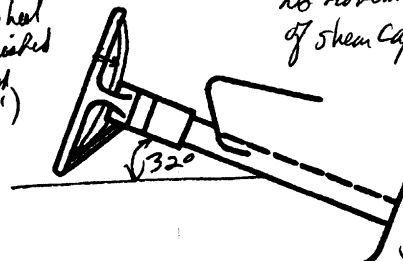
92. Odometer Reading 10,000
 kilometers
 Code to the nearest 1,000 kilometers
 (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown
6.109 miles X 1.6093 = _____ kilometers
 Source: _____
93. Instrument Panel Damage from Occupant Contact? 0
 (0) No
 (1) Yes
 (9) Unknown
94. Type of Knee Bolster Covering 2
 (0) No knee bolster
 (1) Padded
 (2) Rigid plastic
 (8) Other (specify): _____
 (9) Unknown
95. Knee Bolsters Deformed from Occupant Contact? 1
 (0) No knee bolster
 (1) No deformation
 (2) Yes - deformation
 (9) Unknown
96. Did Glove Compartment Door Open During Collision(s)? 1
 (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown
97. Adaptive (Assistive) Driving Equipment 0
 (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)
☐ Hand controls for braking/acceleration
☐ Steering control devices (attached to OEM steering wheel)
☐ Steering knob attached to steering wheel
☐ Low effort power steering (unit or device)
☐ Replacement steering wheel (i.e., reduced diameter)
☐ Joy-stick steering controls
☐ Wheelchair tie-downs
☐ Modification to seat belts (specify): _____
☐ Additional or relocated switches (specify): _____
☐ Raised roof
☐ Wall-mounted head rest (used behind wheelchair)
☐ Other adaptive device (specify): _____
 (9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



No Damage of Rumi

No movement
of Shear CapsulesWheel
Disks
Recessed
3.2cm (1 1/4")Eye glazing and
Scrubber pads @ hand
contactSmall spider web on belt
and overlapping (tissue) Scrubber @ hand
(17 1/4")Max. Placable
glass fragments scattered on
top of instrument panel
at 1 piece wedged in panel above
pass air bag flapSee
append
documentation
on notes

Light Scrubber marks

8.9cm
3 1/4"
(3 1/2")
(11.0")
27.9cm

8.9cm

8.8cm
(7 3/8")40.6cm
(16" Vertical Drop)Air Bag
Cyclone

hood handle

Scrubber
on 60 liter
@ kneeScuffs
loss from
key fob

45.7cm

2.6cm
8 1/2"
11.0"1.5"
12.2"4.9cm
(19 1/2")4.4cm (17 1/2")
(6")1.9cm
(7 1/2")Scrubber
marks

Floor

Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

FRONT

- (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tapedeck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify):
 (019) Other front object (specify):

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify):
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify):

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify):
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify):

INTERIOR

- (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify):
 (155) Head restraint system
 (160) Other occupants (specify):
 (161) Interior loose objects
 (162) Child safety seat (specify):
 (163) Other interior object (specify):

AIR BAG

- (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify)
 (195) Other air bag compartment cover (specify)

ROOF

- (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify):

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify):
 (409) Additional or relocated switches, (specify):
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
 (2) Probable
 (3) Possible
 (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a child safety seat is present, encode the data on the back of this page 11. If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	L & S	/	L & S
	B-Evidence of usage	Yes	/	Yes
	C-Used in this crash?	Apparently be used	/	to be determined
	D-Proper Use	UNK	Adverse Seat belt has allowed safety	
	E-Failure Modes	None		
	F-Anchorage Adjustment	In full up position	Adj. Range = 3 3/8"	In full down position
SECOND	A-Availability	L & S	Lap	L & S
	B-Evidence of usage	No	No	No
	C-Used in this crash?	No	No	No
	D-Proper Use	-	-	-
	E-Failure Modes	-	-	-
	F-Anchorage Adjustment	-	-	-
OTHER	A-Availability	/	/	/
	B-Evidence of usage	/	/	/
	C-Used in this crash?	/	/	/
	D-Proper Use	/	/	/
	E-Failure Modes	/	/	/
	F-Anchorage Adjustment	/	/	/

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function	/	/	/
	Deployment	/	/	/
	Failure	/	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify): _____

- (3) Air bag not reinstalled

- (9) Unknown

**Air Bag System Deployment
(This Occupant Position)**

- (0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available

- (1) No

- (2) Yes (specify): _____

- (9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	/	/
	B-Use	/	/
	C-Type	/	/
	D-Proper Use	/	/
	E-Failure Modes	/	/

A-Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

D-Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
(9) Unknown

E-Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other automatic belt failure (specify): _____
(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	2 (Scratch in (R) flap)	1 Scratches on cover from child seat
D-Air bag damaged?	01	01
E-Source of air bag damage	—	—
F-Air bag tethered?	Yes	Partial/No
G-Air bag have vent ports?	Yes	NO
H-Other occupant contact air bag?	NO	NO
I-Occupant wearing eyewear?	?	NO

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

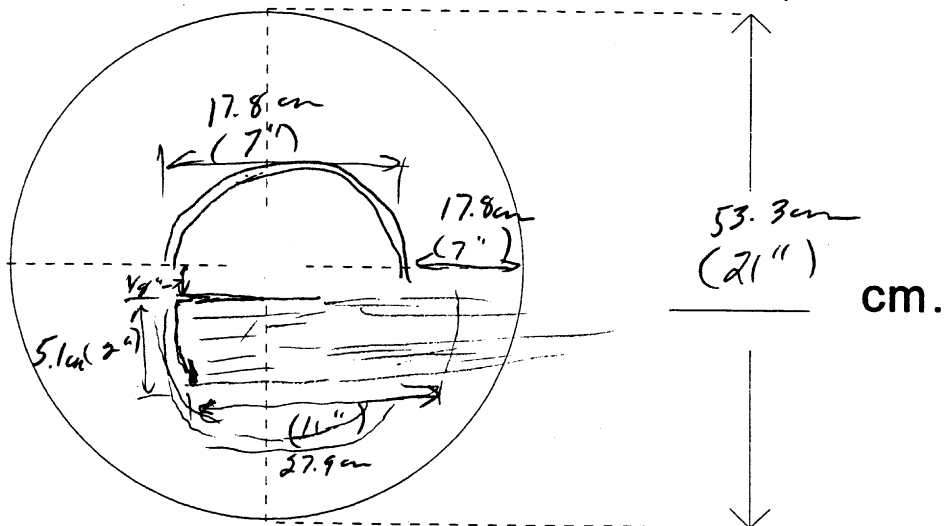
I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)

4 fether

No visible
Identification #s

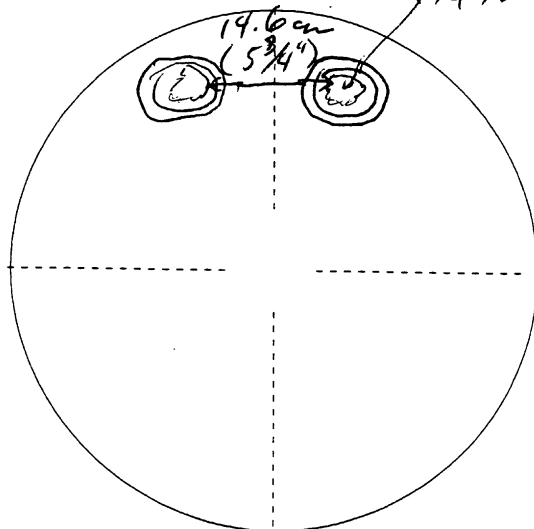


Black
station
transfer
not a defined
(L) side beg pt

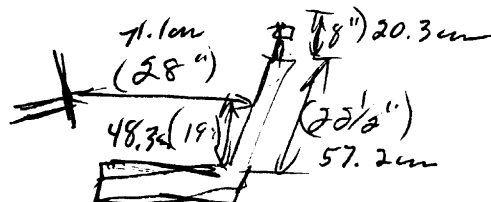
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

Fine Mesh Nylon
on back surface
of bag

19.1 mm
(3/4") Vent ports



LF seat found
in full Rear position
probably moved
7" Aft Range

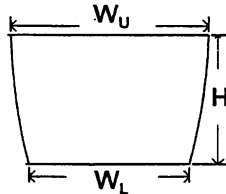


DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____

height (H) : _____

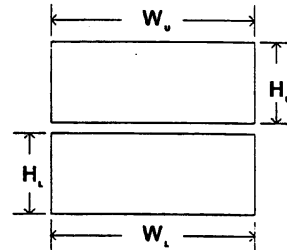


4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

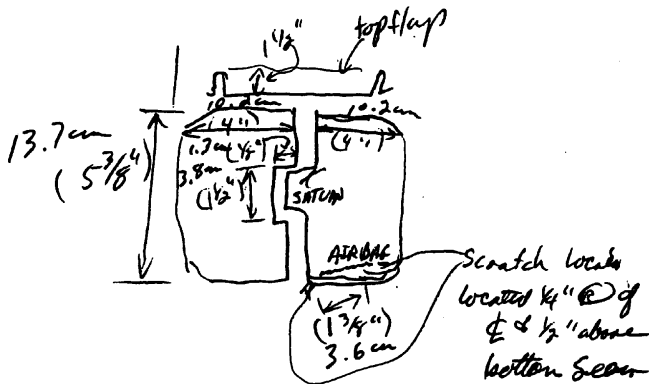
a. Upper Flap b. Lower Flap

width (W_U) _____ width (W_L) _____

height (H_U) _____ height (H_L) _____

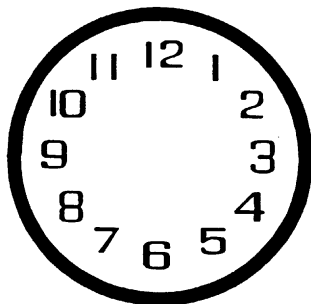


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

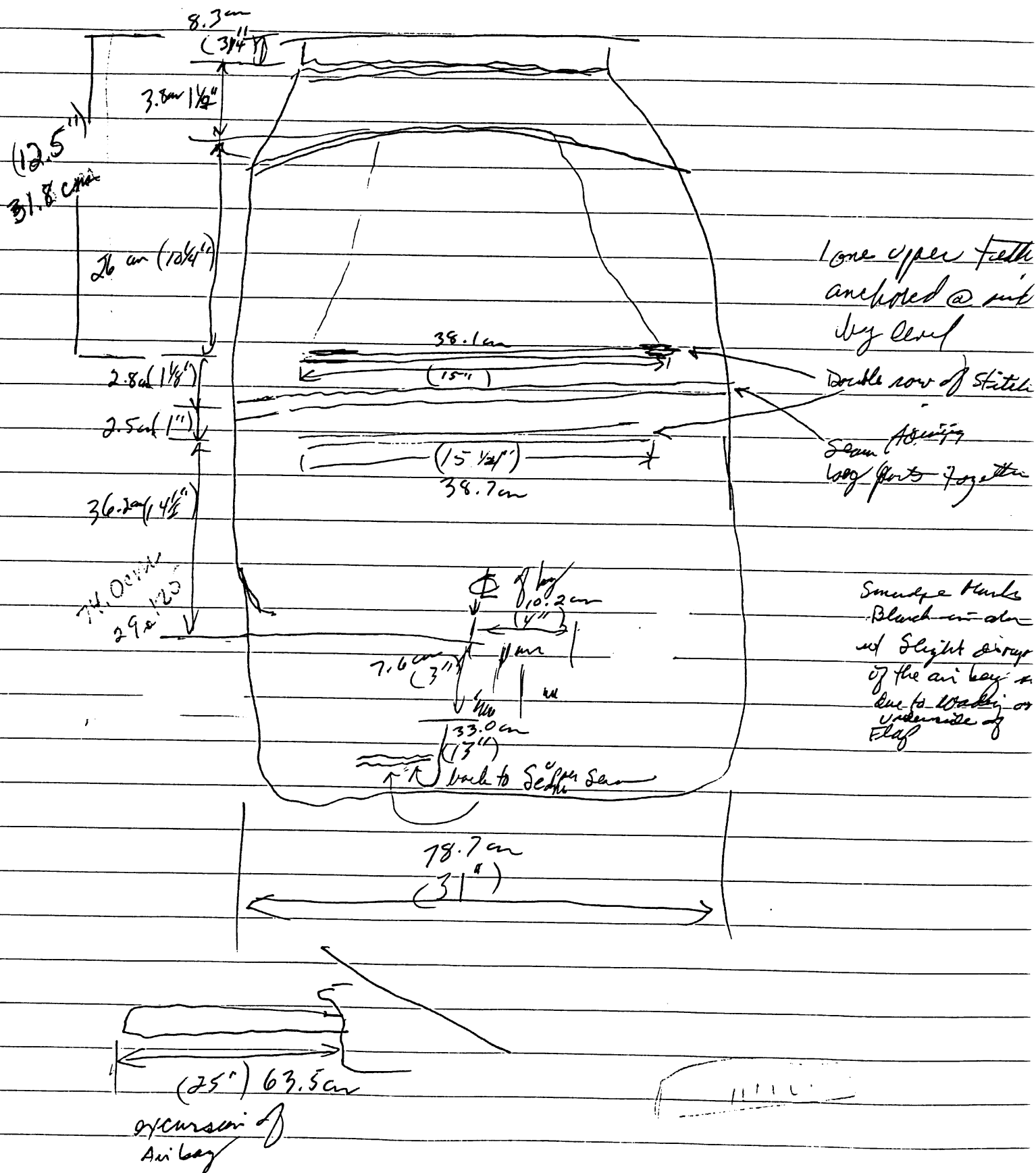


6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



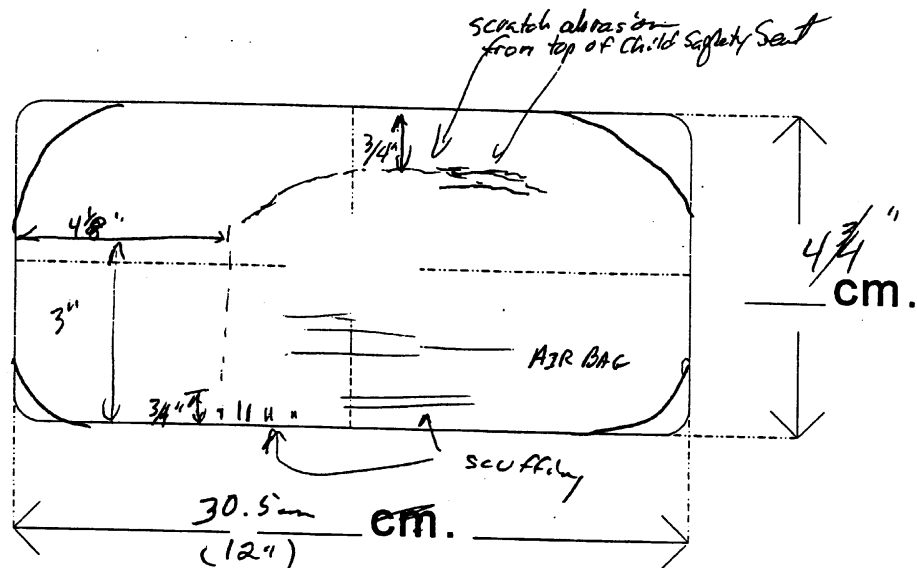
Passenger Side Air Bag



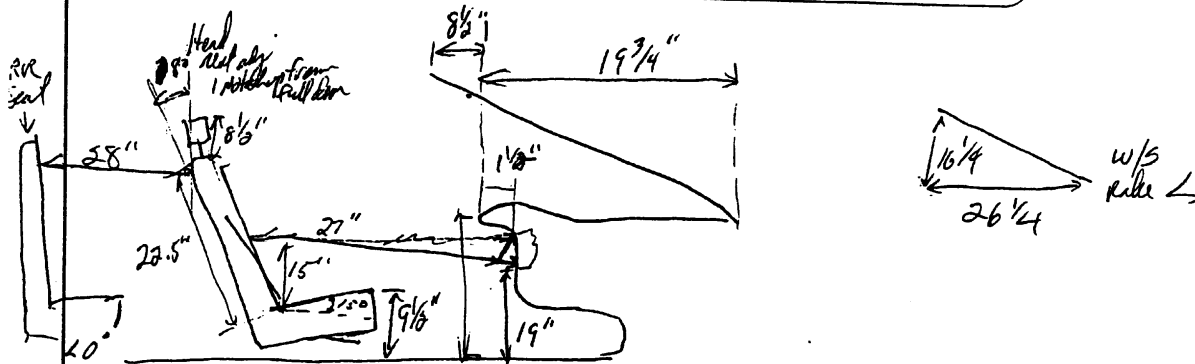
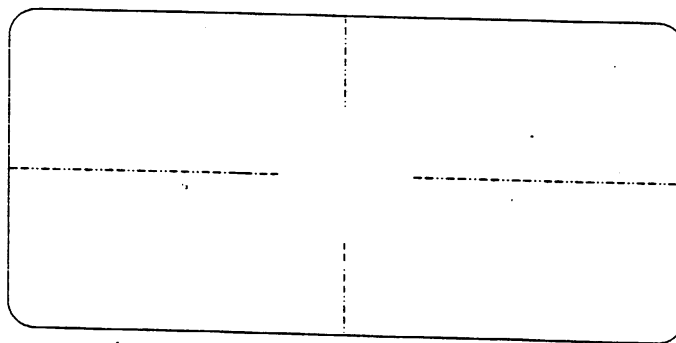
PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)

Module Flap



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



Seat adjusted
2" forward of full rear
position

4" rearward of
full forward

"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	No inches above full down		NO
	B-Seat Type	Bucket/Reclining		Bucket/Reclining
	C-Seat Orientation	Forward		Forward
	D-Seat Track Position	2" from full rear		2" from full rear
	E-Seat Back Incline Pre/Post Impact	26° forward / ? if moved		18° from vertical
	F-Seat Performance	NO problem		NO problem
SECOND	A-Head Restraint Type/Damage	None		
	B-Seat Type	Bench w/ 40/60 integrating split seat back support		
	C-Seat Orientation	Forward		
	D-Seat Track Position	NA		
	E-Seat Back Incline Pre/Post Impact	NA		
	F-Seat Performance	NA		
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number	02					
1. Type of Child Safety Seat	1					
2. Child Safety Seat Orientation	02					
3. Child Safety Seat Harness Usage	12					
4. Child Safety Seat Shield Usage	03					
5. Child Safety Seat Tether Usage	03					

6. Child Safety Seat Make/Model

Infant Pigeon
Infant Restraint
112

Specify Below for Each Child Safety Seat

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
- Specify: _____
- (9) Unknown

B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

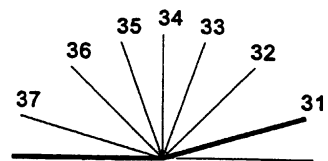
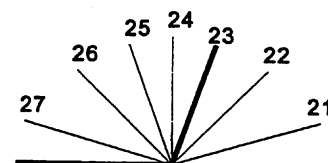
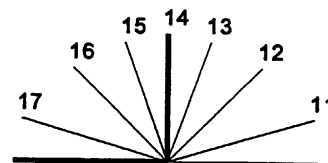
Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes [☐]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [☒] Yes [☐]

Describe entrapment mechanism:

Component(s):

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

___ inches X 2.54 = ___ centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

___ pounds X .4536 = ___ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with
another occupant or to look out a rear
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area

0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium

0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____

- (5) Integral structure
- (8) Other medium (specify): _____

- (9) Unknown

15. Medium Status (Immediately Prior To Impact)

0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment

0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility

4

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify):

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify):

(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 2

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
☐ Official injury data
☐ Driver/occupant interview
☐ Other (specify):

☐ Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System

Availability/Function
 (This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

31. Frontal Air Bag System Deployment
(This Occupant Position)

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag
Availability/Function
(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System Failure?
(This Occupant Position)

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)?

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

+

40. Longitudinal Component of Delta V For Air Bag Deployment Impact

(_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

+ 0 0 0 9

36. Type of Air Bag

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

+

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

2

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System?

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify):
(9) Unknown

+

42. Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
(1) No
(2) Yes (specify):
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

1

38. Air Bag Deployment Accident Event Sequence Number

- (00) Not equipped/not available
Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

0 1

43. Was There Damage To The Air Bag?

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify):

0 1

39. CDC For Air Bag Deployment Impact

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify):

+

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

- (95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps): (4)
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports): (2)
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 1
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 01
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 6
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 23

(00) Occupant not seated or no seat

(01) Not adjustable

Upright prior to impact

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

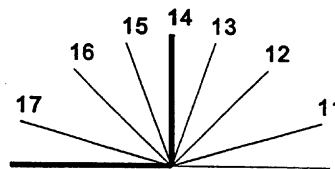
(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

***Slightly reclined prior to impact***

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

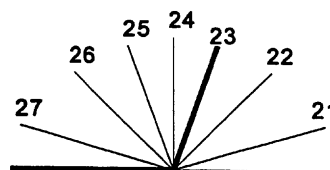
(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

***Completely reclined prior to impact***

(31) Retained pre-impact position

(32) Moved to rearward midrange position

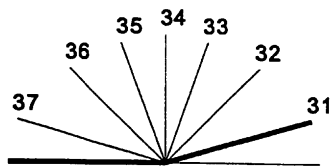
(33) Moved to slightly rearward position

(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) _____

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed
(specify): _____

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment
intrusion, (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000-
(000) No child safety seat
Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):

(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify):

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00
(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market
harness/shield/tether added
(09) Unknown if harness/shield/tether
added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death**

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
 (00) Not fatal
 (96) Fatal - ruled disease
 (99) Unknown

67. 1st Medically Reported Cause of Death**68. 2nd Medically Reported Cause of Death****69. 3rd Medically Reported Cause of Death**
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

(00) Not fatal or no additional causes
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

(00) No recorded injuries
 (97) Injured, details unknown
 (99) Unknown if injured

TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

(00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

72. Was the Occupant Given Blood?

(1) No - blood not given

(2) Yes - blood given

(specify units):

(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃

(00) Not injured

(01) Injured, ABGs not measured or reported

(02-50) Code the actual value of the HCO₃

(96) ABGs reported, HCO₃ unknown

(97) Injured, details unknown

(99) Unknown if injured

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination**

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Vehicle inspection

(2) Official injury data

(3) Driver/occupant interview

(8) Other (specify):

(9) Unknown if belt used

OCCUPANT INJURY FORM

1. Primary Sampling Unit Number	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>96-13</u>	4. Occupant Number <u>01</u>

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90 Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. <u>7</u>	6. <u>7</u>	7. <u>5</u>	8. <u>14</u>	9. <u>20</u>	10. <u>1</u>	11. <u>2</u>	12. <u>001</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>7</u>	17. <u>7</u>	18. <u>9</u>	19. <u>06</u>	20. <u>00</u>	21. <u>1</u>	22. <u>2</u>	23. <u>001</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>7</u>	28. <u>7</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>170</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>7</u>	39. <u>7</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>170</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>7</u>	50. <u>5</u>	51. <u>9</u>	52. <u>02</u>	53. <u>02</u>	54. <u>1</u>	55. <u>4</u>	56. <u>152</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>7</u>	61. <u>5</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>4</u>	67. <u>152</u>	68. <u>1</u>	69. <u>1</u>	70. <u>00</u>
7th	71. <u>7</u>	72. <u>7</u>	73. <u>9</u>	74. <u>04</u>	75. <u>02</u>	76. <u>1</u>	77. <u>1</u>	78. <u>170</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>7</u>	83. <u>4</u>	84. <u>9</u>	85. <u>04</u>	86. <u>02</u>	87. <u>1</u>	88. <u>4</u>	89. <u>152</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
9th	93. <u> </u>	94. <u> </u>	95. <u> </u>	96. <u> </u>	97. <u> </u>	98. <u> </u>	99. <u> </u>	100. <u> </u>	101. <u> </u>	102. <u> </u>	103. <u> </u>
10th	104. <u> </u>	105. <u> </u>	106. <u> </u>	107. <u> </u>	108. <u> </u>	109. <u> </u>	110. <u> </u>	111. <u> </u>	112. <u> </u>	113. <u> </u>	114. <u> </u>

OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck			(3) Bilateral
(4) Thorax			(4) Central
(5) Abdomen	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
Type of Anatomic Structure	Whole Area	Abbreviated Injury Scale	
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion	(1) Minor Injury	(2) Moderate Injury
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	(4) Severe Injury
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(5) Critical Injury	(6) Maximum (untreatable)
(5) Skeletal (includes joints)	(10) Amputation	(7) Injured, unknown severity	
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

SOURCE OF INJURY DATA

INJURY SOURCE

DIRECT/INDIRECT INJURY

CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____

- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): _____
- (454) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): _____
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): _____
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): _____
- (514) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): _____
- (599) Unknown vehicle or object

NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): _____
- (604) Air bag exhaust gases
- (697) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

☐ No

☐ Yes

Blood Alcohol Level
(mg/dl)

BAL =

Glasgow Coma
Scale Score

GCSS =

Units of Blood
Given

Units =

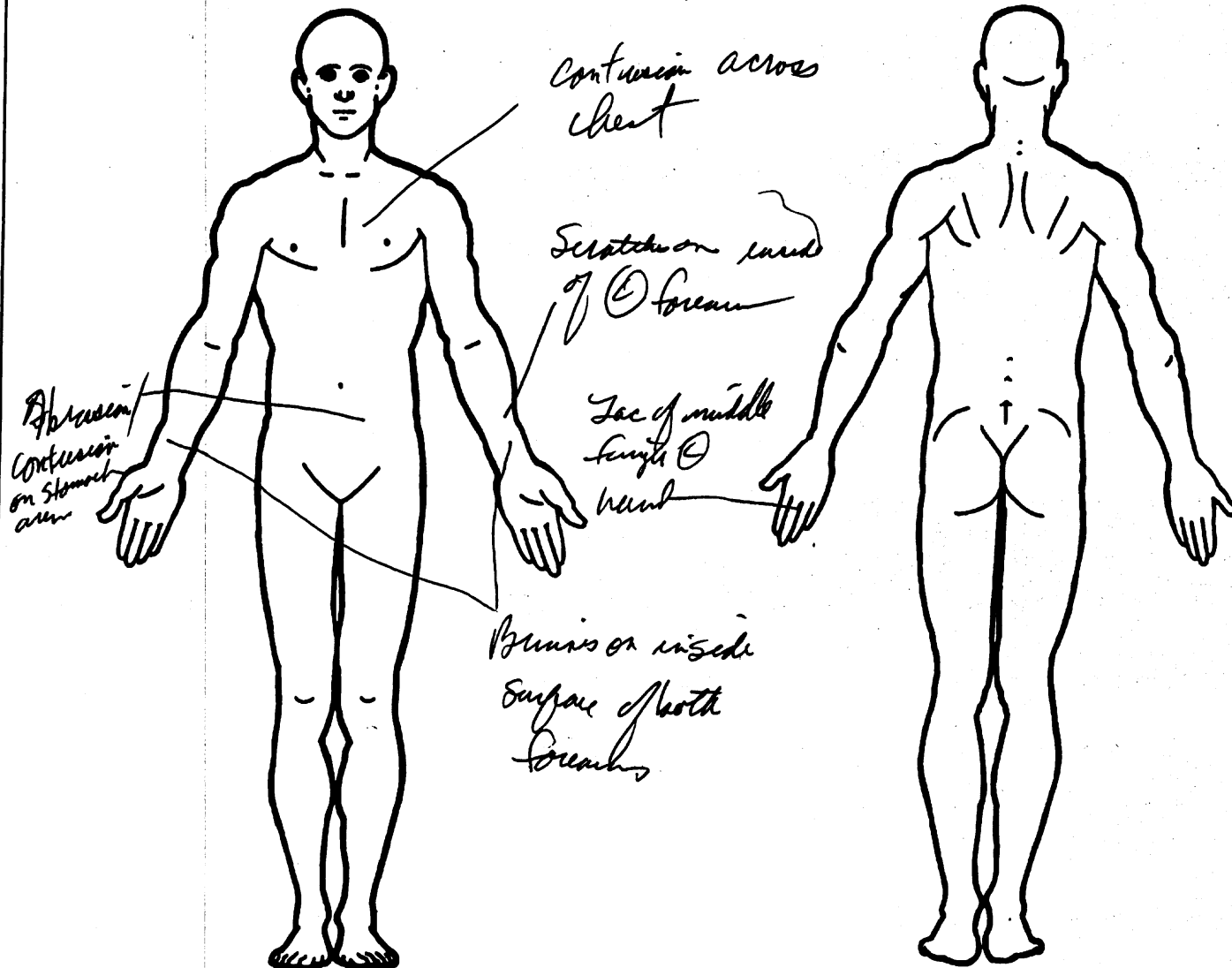
Arterial Blood Gases

pH =

PO₂ =

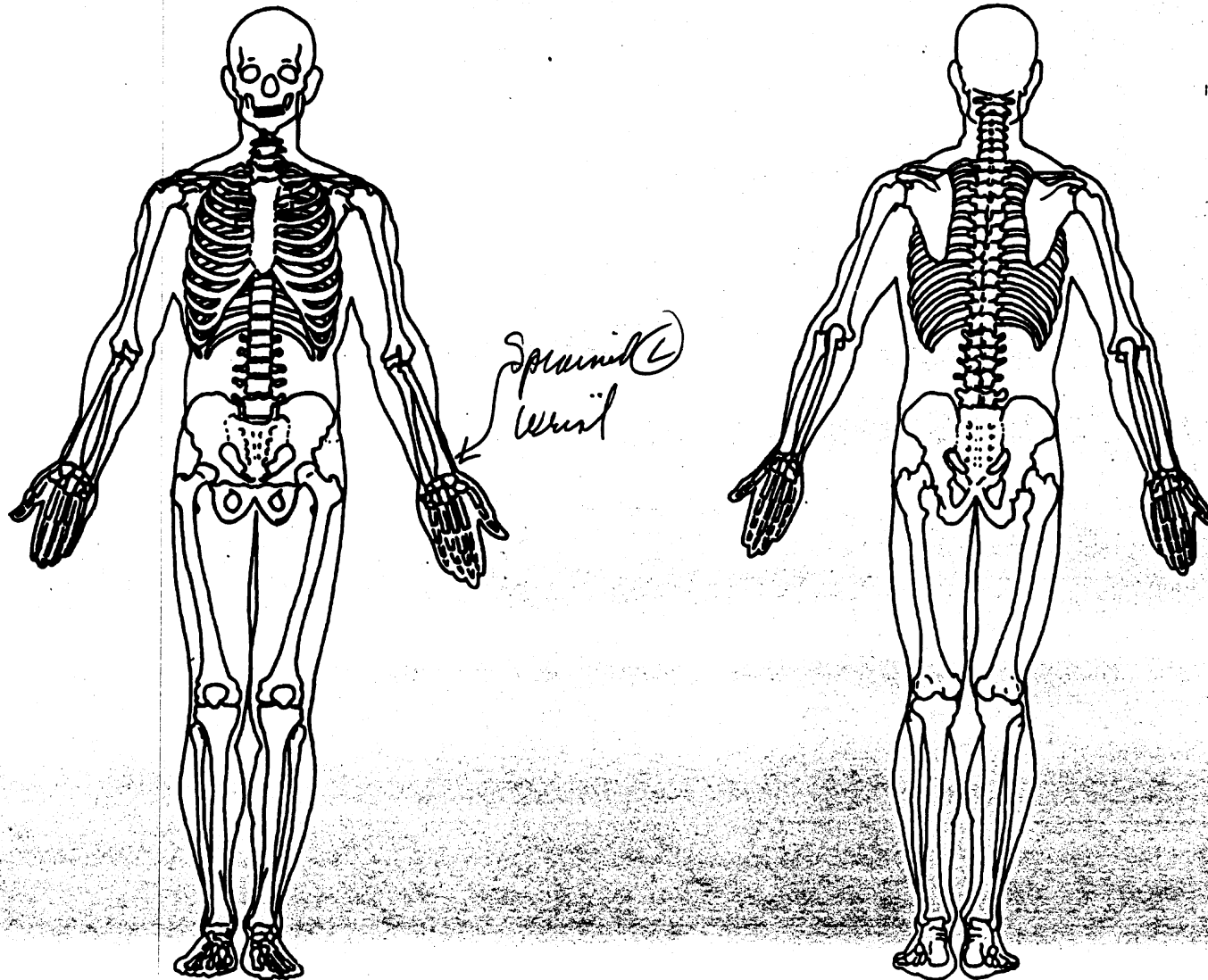
PCO₂

HCO₃



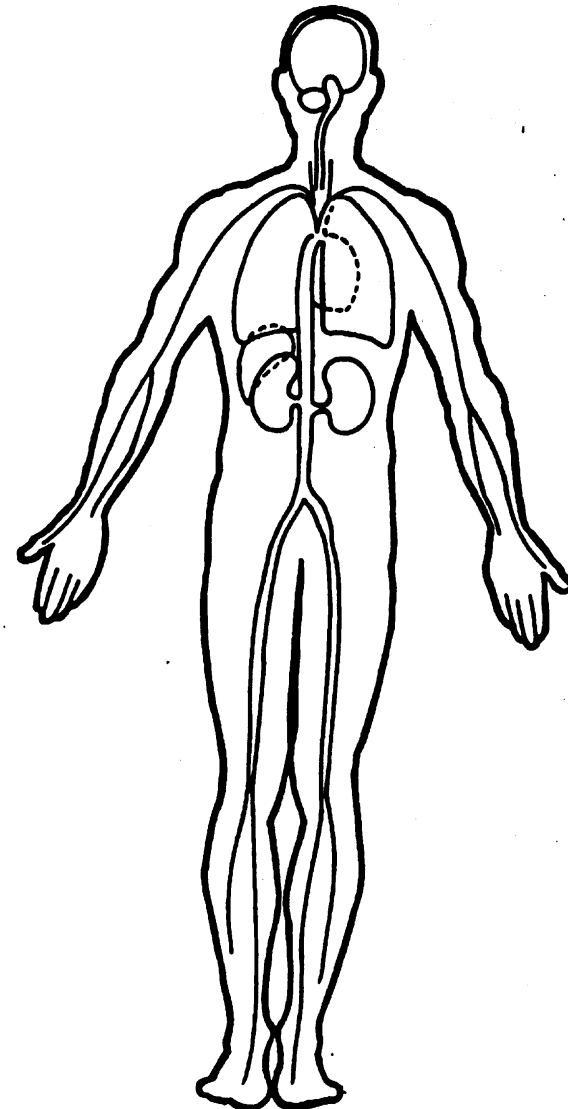
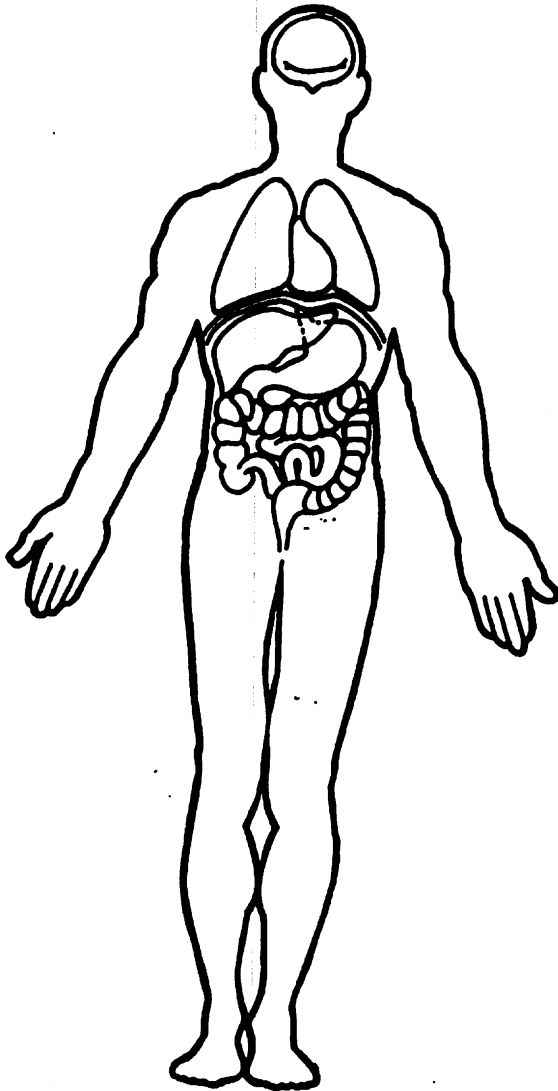
OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

_____ inches X 2.54 = _____ centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

_____ pounds X .4536 = _____ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): _____

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): _____

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): _____

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): _____

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): _____

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with
another occupant or to look out a rear
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in
front of seat

(8) Other abnormal posture (specify): _____

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

0

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

0

15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

0

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

2

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4
- (0) None available
 - (1) Belt removed/destroyed
 - (2) Shoulder belt
 - (3) Lap belt
 - (4) Lap and shoulder belt
 - (5) Belt available—type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
 - (7) Lap belt (shoulder belt destroyed/removed)
 - (8) Other belt (specify): _____
 - (9) Unknown
19. Manual (Active) Belt System Use 13
- (00) None used, not available, or belt removed/destroyed
 - (01) Inoperative (specify): _____
 - (02) Shoulder belt
 - (03) Lap belt
 - (04) Lap and shoulder belt
 - (05) Belt used—type unknown
 - (08) Other belt used (specify): _____
 - (12) Shoulder belt used with child safety seat
 - (13) Lap belt used with child safety seat
 - (14) Lap and shoulder belt used with child safety seat
 - (15) Belt used with child safety seat—type unknown
 - (18) Other belt used with child safety seat (specify): _____
 - (99) Unknown if belt used
20. Proper Use of Manual (Active) Belts 1
- (0) None used or not available
 - (1) Belt used properly
 - (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
 - (4) Shoulder belt worn behind back or seat
 - (5) Belt worn around more than one person
 - (6) Lap belt worn on abdomen
 - (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of manual belt system (specify): _____
 - (9) Unknown
21. Manual (Active) Belt Failure Modes During Accident 1
- (0) No manual belt used or not available
 - (1) No manual belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other manual belt failure (specify): _____
 - (9) Unknown
22. Manual Shoulder Belt Upper Anchorage Adjustment 4
- (0) No manual shoulder belt
 - (1) No upper anchorage adjustment for manual shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
 - (3) In mid position
 - (4) In full down position
 - (5) Position unknown
 - (9) Unknown if position has adjustable upper anchorage adjustment
23. Automatic (Passive) Belt System Availability/Function 0
- (0) Not equipped/not available
 - (1) 2 point automatic belts
 - (2) 3 point automatic belts
 - (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
 - (9) Unknown
24. Automatic (Passive) Belt System Use 0
- (0) Not equipped/not available/destroyed or rendered inoperative
 - (1) Automatic belt in use
 - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
 - (3) Automatic belt use unknown
 - (9) Unknown
25. Automatic (Passive) Belt System Type 0
- (0) Not equipped/not available
 - (1) Non-motorized system
 - (2) Motorized system
 - (9) Unknown
26. Proper Use of Automatic (Passive) Belt System 0
- (0) Not equipped/not available/not used
 - (1) Automatic belt used properly
 - (2) Automatic belt used properly with child safety seat
- Automatic Belt Used Improperly*
- (3) Automatic shoulder belt worn under arm
 - (4) Automatic shoulder belt worn behind back
 - (5) Automatic belt worn around more than one person
 - (6) Lap portion of automatic belt worn on abdomen
 - (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of automatic belt system (specify): _____
 - (9) Unknown
27. Automatic (Passive) Belt Failure Modes During Accident 0
- (0) Not equipped/not available/not in use
 - (1) No automatic belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other automatic belt failure (specify): _____
 - (9) Unknown

POLICE REPORTED RESTRAINT USE

AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 6

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☐ Unknown if belt used

30. Frontal Air Bag System 1

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

(0) Not equipped/not available

(1) No previous accidents

Yes

(2) Previous accident(s) without deployment(s)

(3) One previous accident with deployment

(4) More than one previous accident with at least one deployment

(8) Previous accidents, unknown deployment status

(9) Unknown

36. Type of Air Bag 1

(0) Not equipped/not available

(1) Original manufacturer installed system

(2) Retrofitted air bag

(3) Replacement air bag

(8) Unknown type of air bag

(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

(0) Not equipped/not available

(1) No prior maintenance

(2) Yes, prior maintenance (specify): _____

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

(00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

(96) Deployed, unknown event

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

39. CDC For Air Bag Deployment Impact 1

(0) Not equipped/not available

(1) Highest delta V

(2) Second highest delta V

(3) Other non-coded delta V (specify): _____

(6) Deployed, unknown event

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

40. Longitudinal Component of

Delta V For Air Bag

Deployment Impact

(_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(_996) Deployment, unknown longitudinal Delta V

(_997) Not deployed

(_998) Unknown if deployed

(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

(0) Not equipped/not available

(1) No

(2) Yes

(3) Deployed, unknown if flap(s) opened at designated tear points

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): _____

(3) Deployed, unknown if air bag module cover flap(s) damaged

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

43. Was There Damage To The Air Bag? 01

(00) Not equipped/not available

(01) Not damaged

Yes - Air Bag Damage

(02) Ruptured

(03) Cut

(04) Torn

(05) Holed

(06) Burned

(07) Abraded

(88) Other damage (specify): _____

(95) Damaged, details unknown

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 1
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

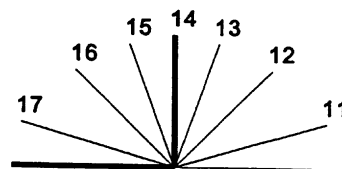
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 01
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 4
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

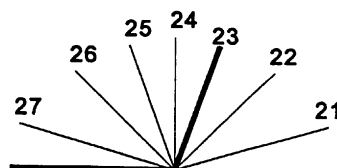
53. Seat Back Incline Prior and Post Impact 2 3
 (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

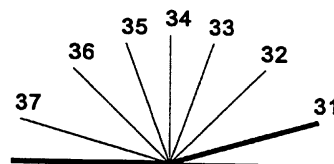
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position
 (99) Unknown



54. Seat Performance (this Occupant Position) _____
 (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 06

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 97

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death**

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death**68. 2nd Medically Reported Cause of Death****69. 3rd Medically Reported Cause of Death**
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood?

- (1) No - blood not given
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination**

- (0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):
(9) Unknown if belt used



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	A.I.S. - 90			Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number			
			Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury						
1st	5. 2	6. 1	7. 5	8. 04	9. 04	10. 3	11. 1	12. 180 (185)	13. 1	14. 1	15. 00
2nd	16. 2	17. 1	18. 4	19. 06	20. 04	21. 3	22. 2	23. 180 (145)	24. 1	25. 1	26. 00
3rd	27. 2	28. 1	29. 4	30. 06	31. 52	32. 4	33. 2	34. 180 (185)	35. 1	36. 1	37. 00
4th	38. 2	39. 1	40. 9	41. 04	42. 02	43. 1	44. 1	45. 180 (185)	46. 1	47. 1	48. 00
5th	49. 2	50. 1	51. 6	52. 04	53. 04	54. 2	55. 0	56. 180 (185)	57. 1	58. 1	59. 00
6th	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.

OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity	The exceptions to this rule apply to:		(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		Abbreviated Injury Scale	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

SOURCE OF INJURY DATA

INJURY SOURCE
CONFIDENCE LEVEL

DIRECT/INDIRECT INJURY

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): _____
- (195) Other air bag compartment cover (specify): _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): _____
- (454) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): _____
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): _____
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): _____
- (514) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): _____
- (599) Unknown vehicle or object

NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): _____
- (604) Air bag exhaust gases
- (697) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

☐ No

☐ Yes

Blood Alcohol Level
(mg/dl)

BAL = ____

Glasgow Coma
Scale Score

GCSS = ____

Units of Blood
Given

Units = ____

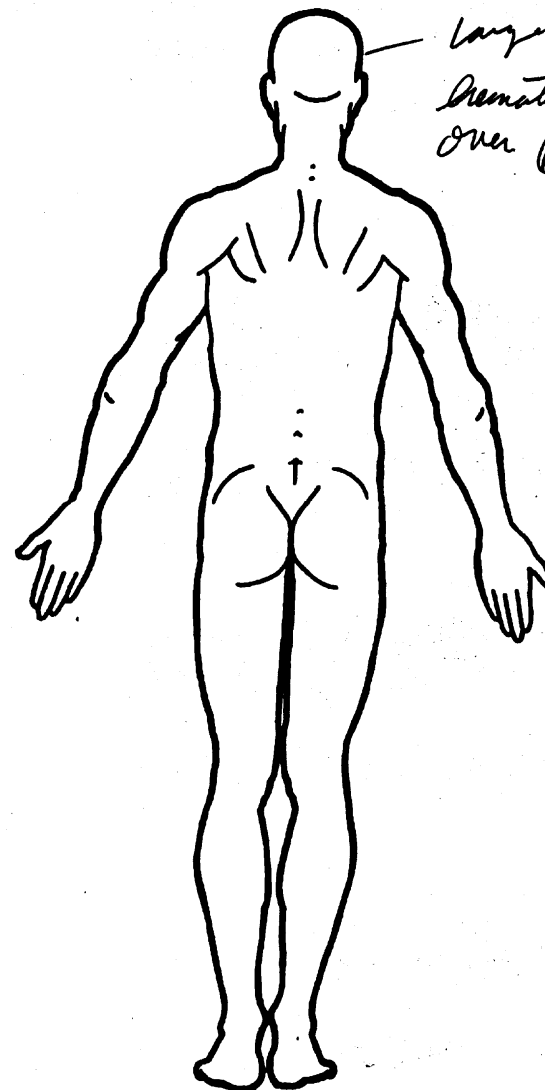
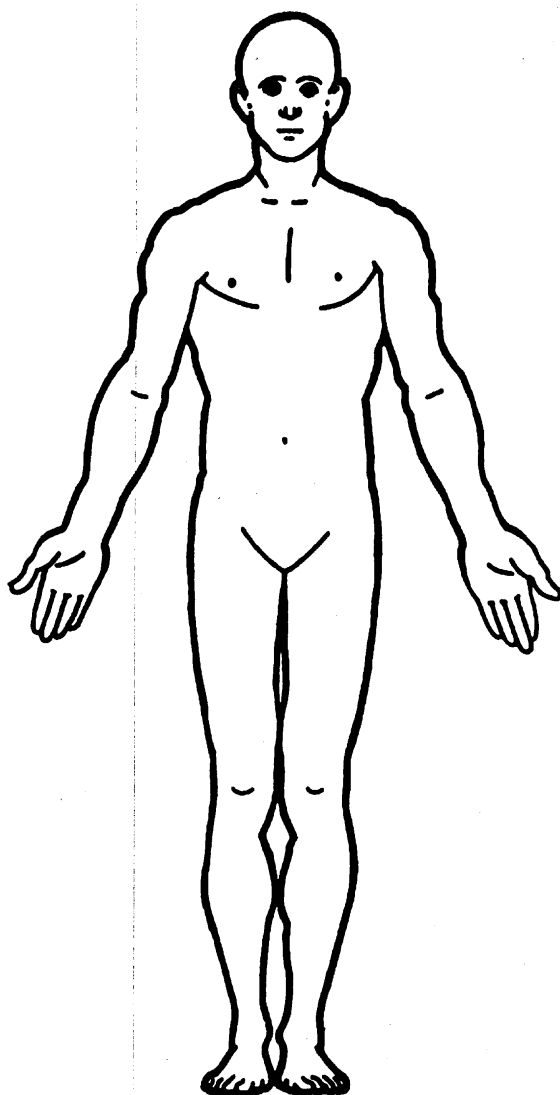
Arterial Blood Gases

pH = ____

PO₂ = ____

PCO₂ ____

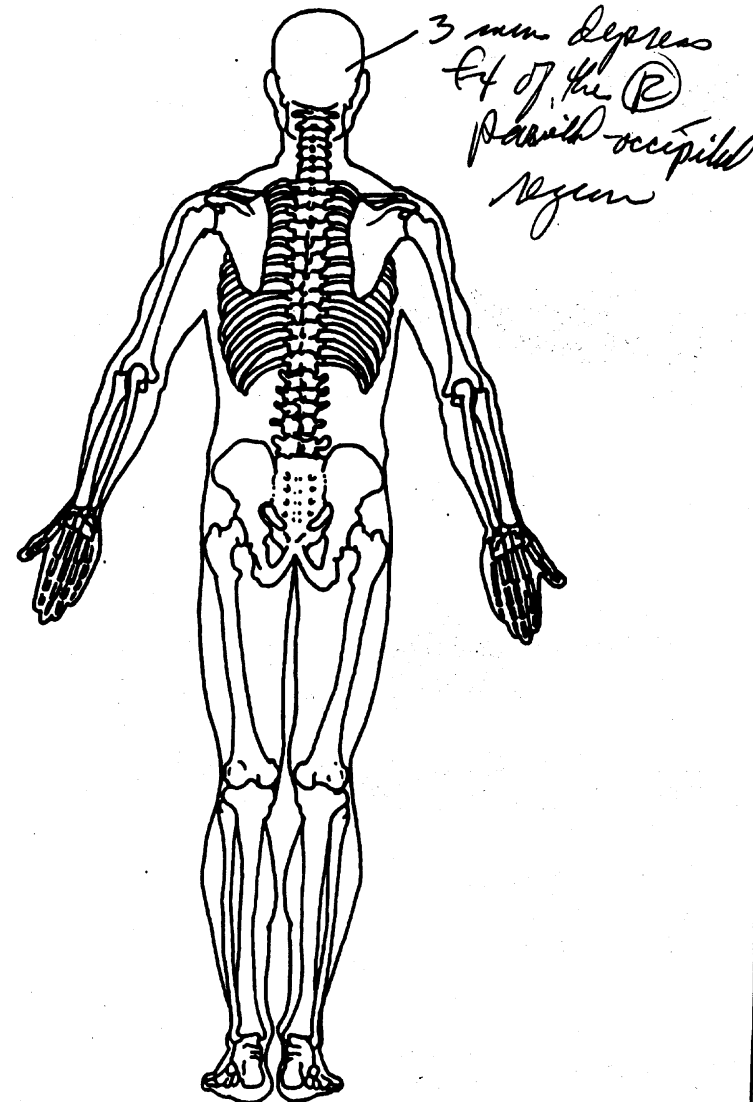
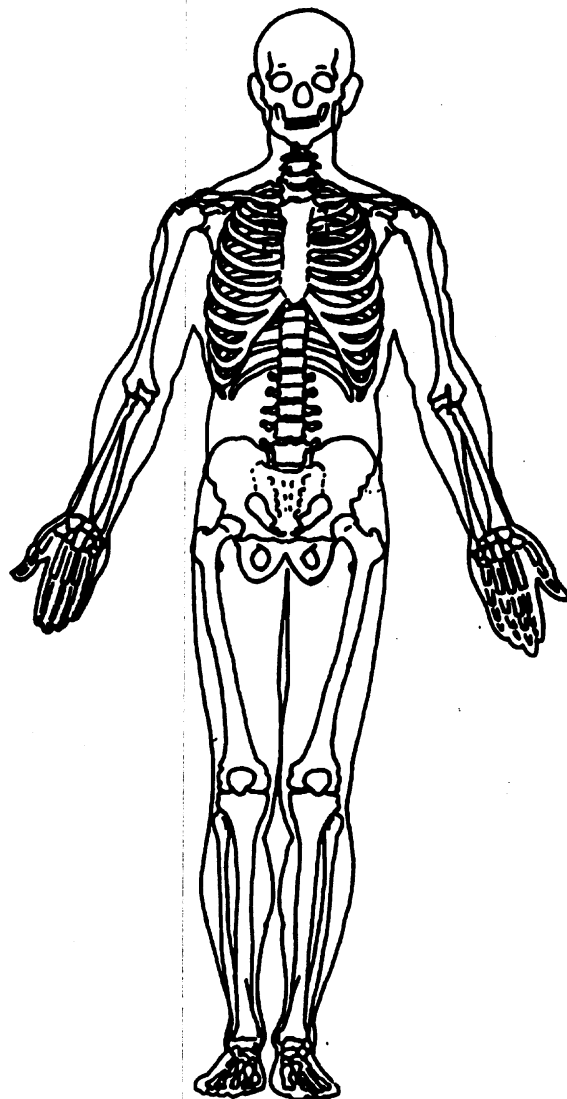
HCO₃ ____



*Large Subgaleal
hematoma & effusion
over @ scalp area*

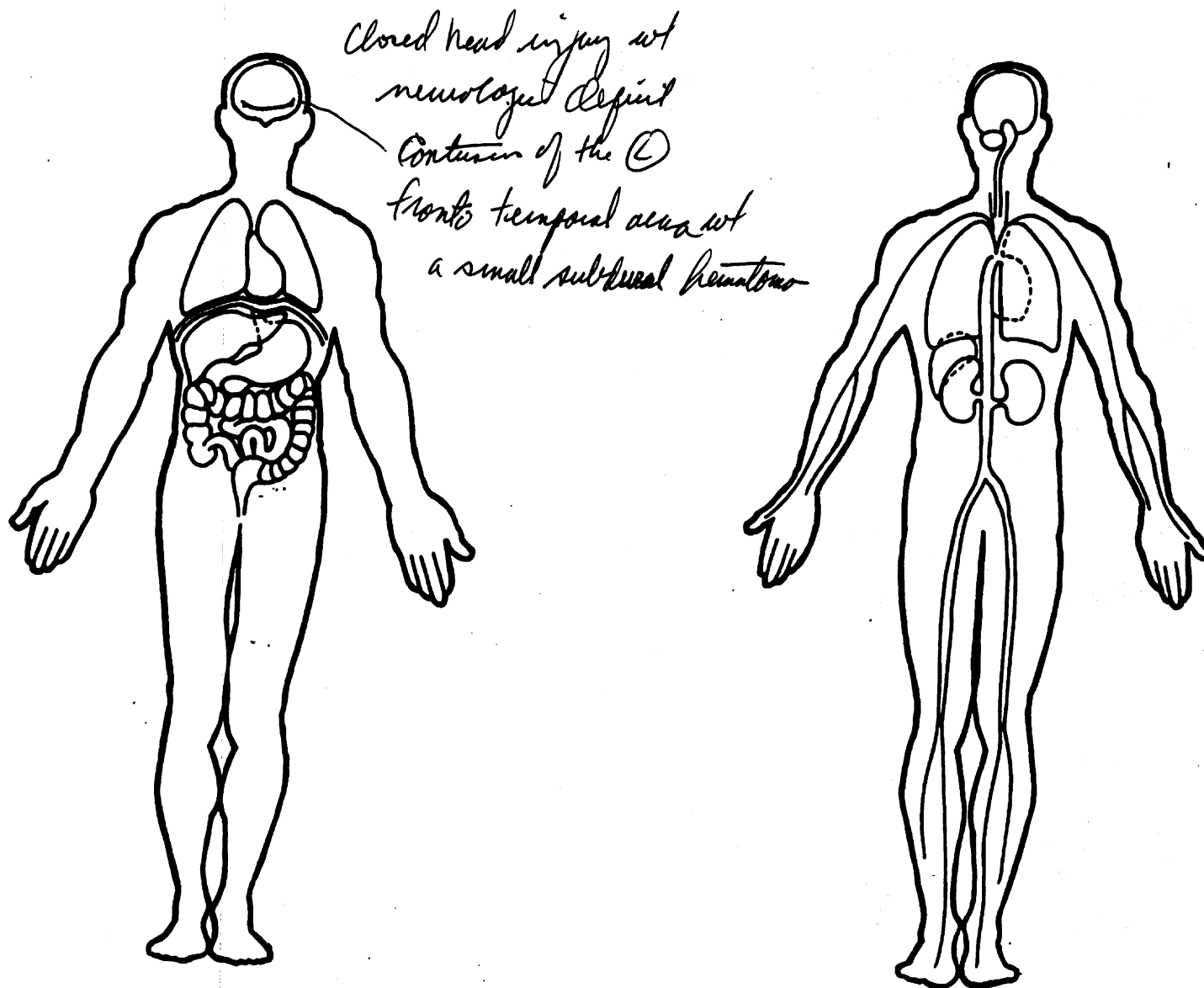
OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-13

3. Vehicle Number 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year 91

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify): 52

Pittsburgh

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify): 037

Calypso

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type 02

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

4A3CS54U6ME (Serial # omitted)

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 0

(0) Not towed due to vehicle damage

(1) Towed due to vehicle damage

(9) Unknown

11. Police Reported Travel Speed 999

Code to the nearest kmph (NOTE: 000 means
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

 mph X 1.6093 = kmph

12. Speed Limit 089

(000) No statutory limit

Code posted or statutory speed limit in kmph

(999) Unknown

 mph X 1.6093 = kmph

13. Police Reported Alcohol Presence For Driver 9

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver 96

Code actual value (decimal implied
before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source:

15. Police Reported Other Drug Presence For Driver 9

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver 0

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin 1

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 2

- (0) Non-interchange area and non-junction
(1) Interchange area related

Non-Interchange junctions

- (2) Intersection related
(3) Driveway, alley access related
(4) Other junction (specify) _____

(5) Unknown type of junction _____

(9) Unknown

20. Trafficway Flow 0

- (0) Not physically divided (two way traffic)
(1) Divided trafficway-median strip without positive barrier
(2) Divided trafficway-median strip with positive barrier
(3) One way traffic
(9) Unknown

21. Number Of Travel Lanes 2

- (1) One
(2) Two
(3) Three
(4) Four
(5) Five
(6) Six
(7) Seven or more
(9) Unknown

22. Roadway Alignment 1

- (1) Straight
(2) Curve right
(3) Curve left
(9) Unknown

23. Roadway Profile 1

- (1) Level
(2) Uphill grade (> 2%)
(3) Hill crest
(4) Downhill grade (> 2%)
(5) Sag
(9) Unknown

24. Roadway Surface Type 2

- (1) Concrete
(2) Bituminous (asphalt)
(3) Brick or block
(4) Slag, gravel, or stone
(5) Dirt
(8) Other (specify): _____
(9) Unknown

25. Roadway Surface Condition 1

- (1) Dry
(2) Wet
(3) Snow or slush
(4) Ice
(5) Sand, dirt, or oil
(8) Other (specify): _____
(9) Unknown

26. Light Conditions 5

- (1) Daylight
(2) Dark
(3) Dark, but lighted
(4) Dawn
(5) Dusk
(9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions
(1) Rain
(2) Sleet/hail
(3) Snow
(4) Fog
(5) Rain and fog
(6) Sleet and fog
(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
(9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)
(1) Traffic control signal (not RR crossing)

Regulatory

- (2) Stop sign
(3) Yield sign
(4) School zone sign
(5) Other regulatory sign (specify): _____

(6) Warning sign (not RR crossing) _____

(7) Unknown sign _____

(8) Miscellaneous/other controls including RR controls (specify): _____

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device
(1) Traffic control device not functioning (specify): _____
(2) Traffic control device functioning properly
(9) Unknown

PRECRAASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 01
- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- Distractions*
- (03) By other occupant(s), (specify): _____
- (04) By moving object in vehicle (specify): _____
- (05) While talking or listening to cellular phone (specify location and type of phone): _____
- (06) While dialing cellular phone (specify location and type of phone): _____
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): _____
- (09) While using other device/controls integral to vehicle (specify): _____
- (10) While using or reaching for device/object brought into vehicle (specify): _____
- (11) Sleepy or fell asleep
- (12) Distracted by outside person, object, or event (specify): _____
- (13) Eating or drinking
- (14) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): _____
- (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 14
- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): _____
- (99) Unknown

32. Critical Precrash Event 62
- THIS VEHICLE LOSS OF CONTROL DUE TO:**
- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

THIS VEHICLE TRAVELLING

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

33. Attempted Avoidance Maneuver

09

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability

1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location

4

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type

69

(Note: Applicable codes on back of this page)

(00) No impact

Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
38. Number of Occupants This Vehicle 01
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
39. Number of Occupant Forms Submitted 01

AIR BAG RELATED

40. Is this an AOPS Vehicle? 0
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1140
 _____ Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

44. Vehicle Cargo Weight 000
 _____ Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

ROLLOVER DATA

45. Rollover 00
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
48. Rollover Initiation Object Contacted 00
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify): _____
- Underride (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify): _____
- (7) Medium/heavy truck or bus override (of any configuration)
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (996) Non-horizontal impact
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

53. Heading Angle For This Vehicle 191
54. Heading Angle For Other Vehicle 315

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
- (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted < 45 degrees
 (4) Tilted ≥ 45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify): _____
 (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 02
- (00) No vehicle inspection
- Delta V Calculated*
 (01) Reconstruction program-damage only routine
 (02) Reconstruction program-damage and trajectory routine
 (03) Missing vehicle algorithm
- Delta V Not Calculated*
 (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

- (05) Rollover
 (06) Other non-horizontal forces
 (07) Sideswipe type damage
 (08) Severe override
 (09) Yielding object
 (10) Overlapping damage
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): _____

(98) Other, (specify): _____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

11

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
 (160) 159.5 kmph and above
 (999) Unknown

60. Longitudinal Component of Delta V

Highest

+ 009

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: __000 means greater than
 -0.5 kmph and less than +0.5 kmph)
 (±160) ±159.5 kmph and above
 (__999) Unknown

61. Lateral Component of Delta V

Highest

+ 005

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: __000 means greater than -0.5 kmph and
 less than +0.5 kmph)
 (±160) ±159.5 kmph and above
 (__999) Unknown

62. Energy Absorption

Highest

11,900

____ Nearest 100 joules (highest)

____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
 (9997) 999,650 joules or more
 (9999) Unknown

63. Impact Speed

Highest

083

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means
 less than 0.5 kmph)
 (160) 159.5 kmph and above
 (998) Trajectory algorithm not run
 (999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

3

- (0) No reconstruction
 (1) Collision fits model — results appear reasonable
 (2) Collision fits model — results appear high
 (3) Collision fits model — results appear low
 (4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

014

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means
 less than 0.5 kmph)
 (160) 159.5 kmph and above
 (999) Unknown

ESTIMATED DELTA V	INSPECTION TYPE
<p>66. Estimated Highest Delta V (Researcher Determined) <u>0</u></p> <p>(0) Reconstruction Delta V coded</p> <p><i>Estimated Delta V</i></p> <p>(1) Less than 10 kmph</p> <p>(2) ≥ 10 kmph but < 25 kmph</p> <p>(3) ≥ 25 kmph but < 40 kmph</p> <p>(4) ≥ 40 kmph but < 55 kmph</p> <p>(5) ≥ 55 kmph</p> <p><i>Other estimates of damage severity</i></p> <p>(6) Minor</p> <p>(7) Moderate</p> <p>(8) Severe</p> <p>(9) Unknown</p>	<p>67. Type of Vehicle Inspection <u>3</u></p> <p>(0) No inspection</p> <p>(1) Vehicle fully repaired-no damage evident</p> <p>(2) Partial inspection (specify): _____</p> <p>(3) Complete inspection _____</p> <p>DELTA V EVENT NUMBER</p> <p>68. Delta V Event Number <u>1</u></p> <p>_____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle</p> <p>(99) Unknown</p>

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

VEHICLE IDENTIFICATION

VIN 4 A 3 C S 5 4 U 6 M E Model Year 9 1
Vehicle Make (specify): Mitsubishi Vehicle Model (specify): Eclipse
Aug 1990

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
	16.5' ⁵⁰⁰ (6'8" Forward of L/R Axle)	16.5' ⁵⁰⁰ (6'8" Forward of L/R Axle)	73.7' ⁵⁰⁰ (29" Forward of L/R Axle)

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

- a. Rotation physically restricted b. Tire deflated

RF ☒ LF ☒ RR ☒ LR ☒
 RF ☒ LF ☒ RR ☒ LR ☒

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☒ Manual ☐ Automatic

END SHIFT ≥ 10 CM

5 Speed ☐ Yes ☐ No

ORIGINAL SPECIFICATIONS

Wheelbase 246.9 cm
 Overall Length 433.1 cm
 Maximum Width 168.9 cm
 Curb Weight 1144.9 kg
 Average Track 103.9 cm
 Front Overhang 95.3 cm
 Rear Overhang 92.7 cm
 Undeformed End Width — cm
 Engine Size: cyl./displ. 1.8 L

WHEEL STEER ANGLES
(For locked front wheels or displaced rear axles only)

RF ± — °
 LF ± — °
 RR ± — °
 LR ± — °

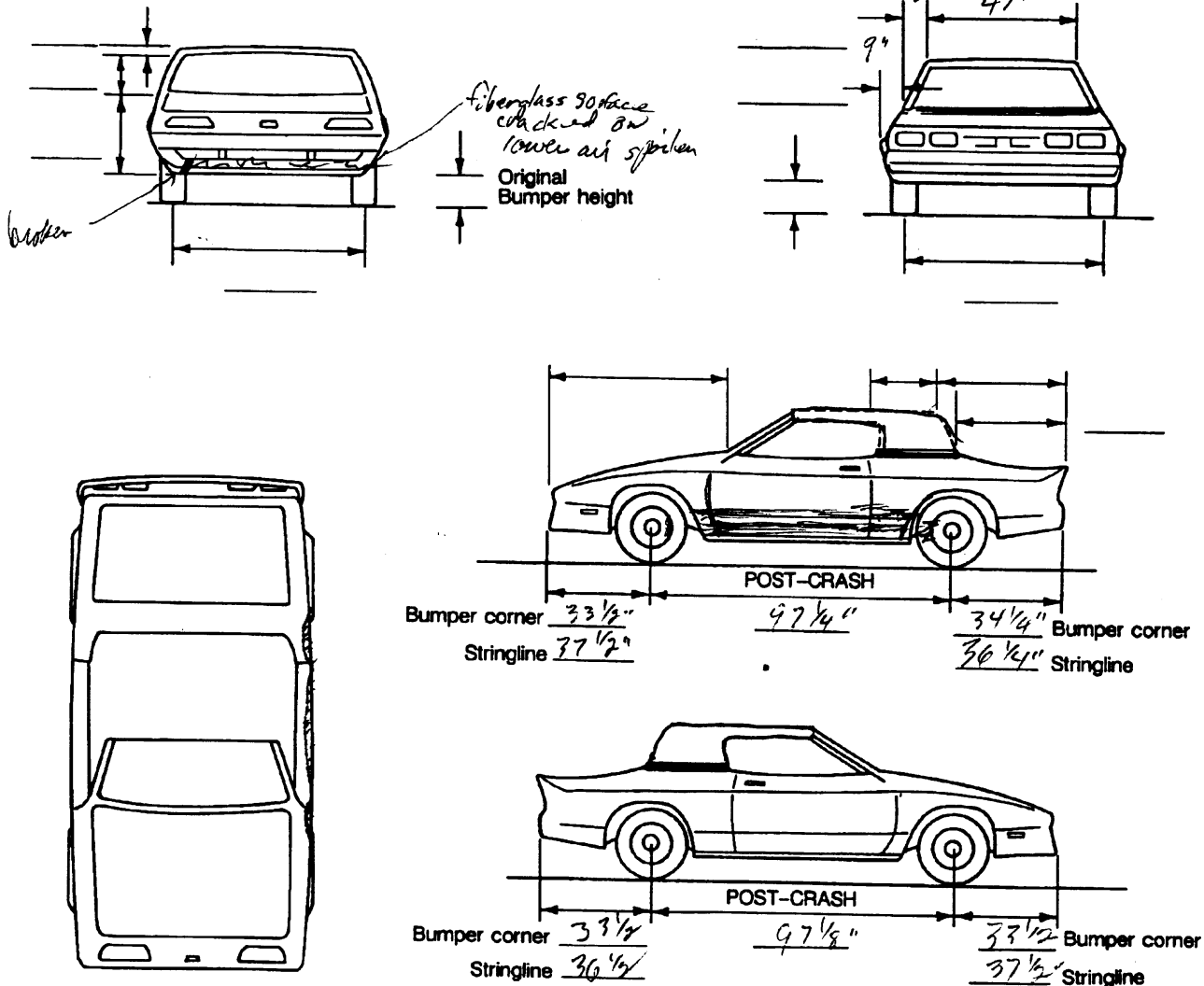
Within ± 5 degrees

DRIVE WHEELS

☒ FWD ☐ RWD ☐ 4WD

Approximate Cargo Weight — kg

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>11</u>	7. <u>L</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>S</u>	11. <u>02</u>

Second Highest Delta "V"

12. _____ 13. _____ 14. _____ 15. _____ 16. _____ 17. _____ 18. _____ 19. _____

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L 21. C₁ C₂ C₃ C₄ C₅ C₆ 22. ± D

197 001 010 006 006 004 004 + 000

Second Highest Delta "V"

23. L 24. C₁ C₂ C₃ C₄ C₅ C₆ 25. ± D

_____ + _____
_____ - _____

26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

_____ Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

198

27. Direct Damage Width

(For highest severity impact)

_____ Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

213

28. Original Wheelbase

_____ Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

_____ inches X 2.54 = _____ centimeters

247

29. Original Average Track Width

_____ Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

_____ inches X 2.54 = _____ centimeters

169

FUEL SYSTEM

30. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle Disposition 0
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage *thru*
(9) Unknown *from scene - later had to have the rear axle repaired*

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications (specify): _____

(Include photograph of CERTIFICATION PLACARD in case report)

(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence 0
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire 1
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____
(9) Unknown

35. Location of Fuel Tank-1 Filler Cap 2

36. Location of Fuel Tank-2 Filler Cap 0
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on left side plane
(3) Aft of center of the rear wheels (rear axle) on right side plane
(4) Forward of center of the rear wheels (rear axle) on left side plane
(5) Forward of center of the rear wheels (rear axle) on right side plane
(6) Over the center of the rear wheels (rear axle) on left side plane
(7) Over the center of the rear wheels (rear axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1 1

38. Type of Fuel Tank-2 0
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 4

40. Location of Fuel Tank-2 0
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle) centered
(2) Aft of center of the rear wheels (rear axle) left side
(3) Aft of center of the rear wheels (rear axle) right side
(4) Forward of center of the rear wheels (rear axle) centered
(5) Forward of center of the rear wheels (rear axle) left side
(6) Forward of center of the rear wheels (rear axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1 1

42. Damage to Fuel Tank-2 0
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1 144. Leakage Location of Fuel System-2 0

- (0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage

- (2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify): _____
(9) Unknown

45. Fuel Type-1 0146. Fuel Type-2 00*Single Fuel Type*

- (00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles

- (10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify): _____

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0

(0) No (one or two tanks only)

Yes - More Than Two Tanks

- (1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 1 11. RF 1 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing light tint - factory

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2

20. BL 2 21. Roof 0 22. Other 0

(0) No glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted (original)

(4) AS-2 - Tempered-with after market tint

(5) AS-3 - Tempered-tinted (with additional after market tint)

(6) AS-14 - Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 0 27. RR 0

28. BL 1 29. Roof 0 30. Other 0

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 0 35. RR 0

36. BL 1 37. Roof 0 38. Other 0

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 0 43. RR 0

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by occupant contact

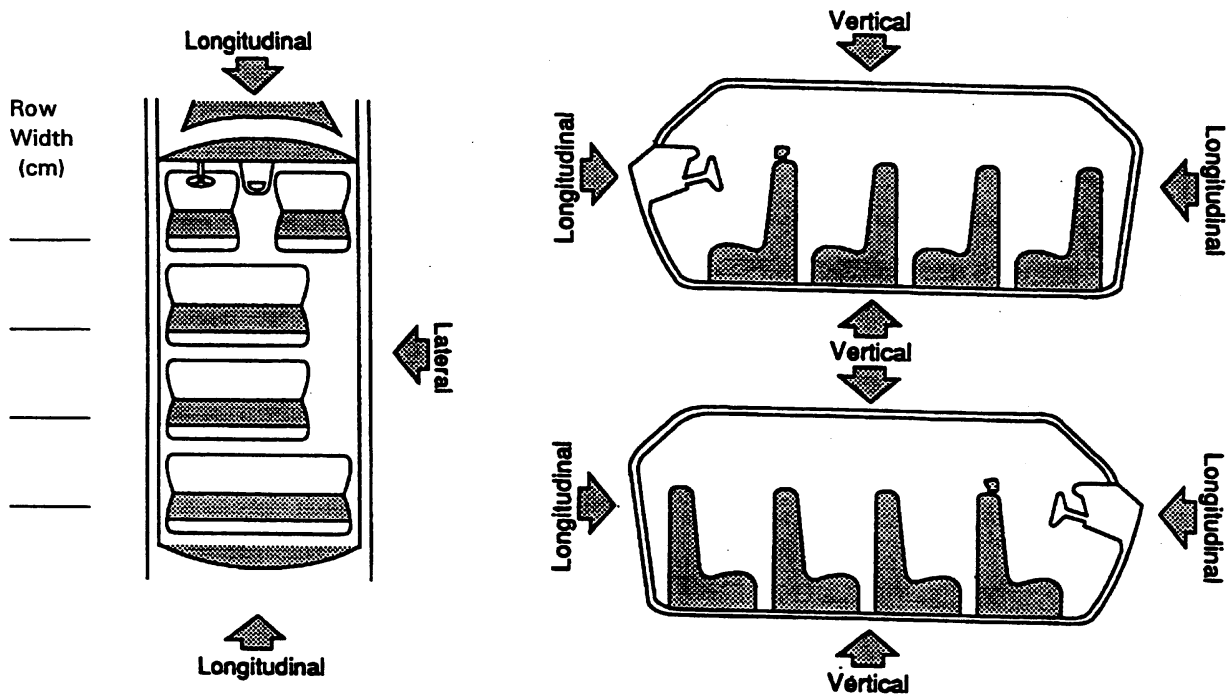
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			INTRUSION	DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____

(99) Unknown

Third Seat

- (31) Left
- (32) Middle
- (33) Right

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

No Intrusion

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

INSTRUMENT PANEL

87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Tilt Steering Column Adjustment 4

- (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

90. Steering Rim/Spoke Deformation 00

- Code actual measured deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 02

- (00) No steering rim deformation

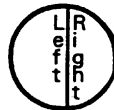
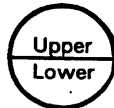
Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D



Half Sections

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke
 (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

92. Odometer Reading 1 6 4,000

_____ kilometers

Code to the nearest 1,000 kilometers

(000) No odometer

(001) Less than 1,500 kilometers

(500) 499,500 kilometers or more

(999) Unknown

101,681 miles X 1.6093 = 163,635 kilometers

Source: _____

93. Instrument Panel Damage from Occupant Contact? 0

(0) No

(1) Yes

(9) Unknown

94. Type of Knee Bolster Covering 0

(0) No knee bolster

(1) Padded

(2) Rigid plastic

(8) Other (specify): _____

(9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 0

(0) No knee bolster

(1) No deformation

(2) Yes - deformation

(9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 0

(0) No glove compartment door

(1) No - door did not open

(2) Yes - door opened

(9) Unknown

97. Adaptive (Assistive) Driving Equipment 0

(0) No adaptive driving equipment

(1) Adaptive driving equipment installed

(Check all that apply.)

[] Hand controls for braking/acceleration

[] Steering control devices (attached to OEM steering wheel)

[] Steering knob attached to steering wheel

[] Low effort power steering (unit or device)

[] Replacement steering wheel (i.e., reduced diameter)

[] Joy-stick steering controls

[] Wheelchair tie-downs

[] Modification to seat belts (specify): _____

[] Additional or relocated switches (specify): _____

[] Raised roof

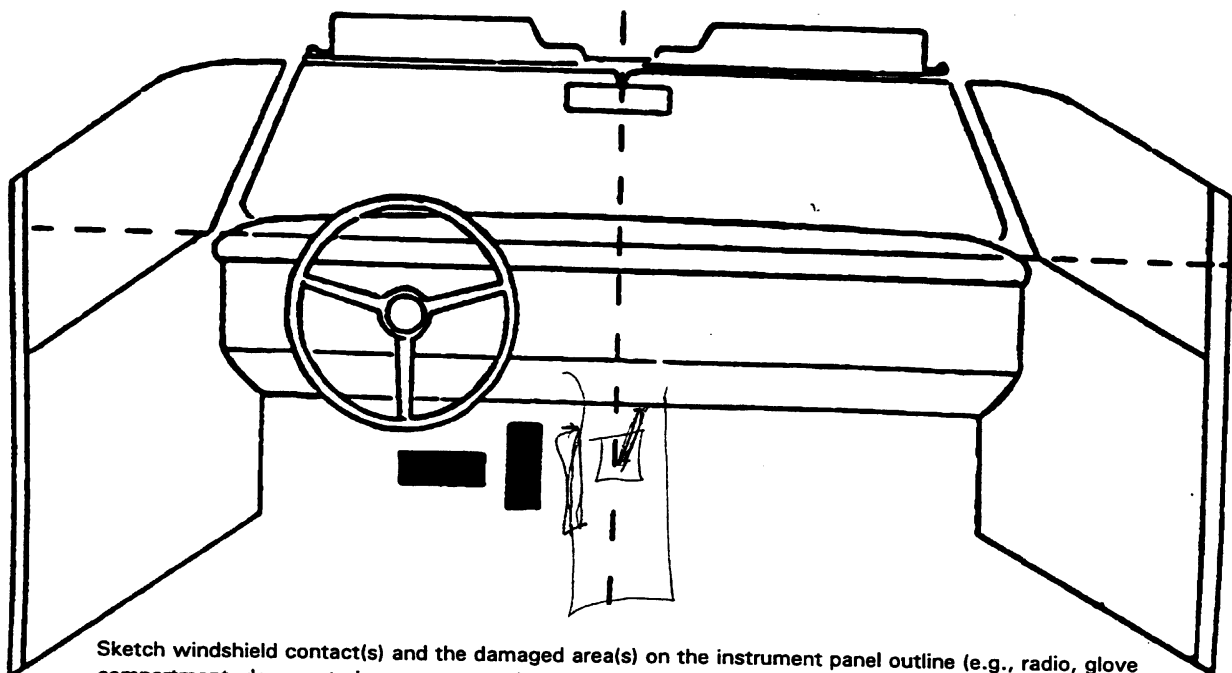
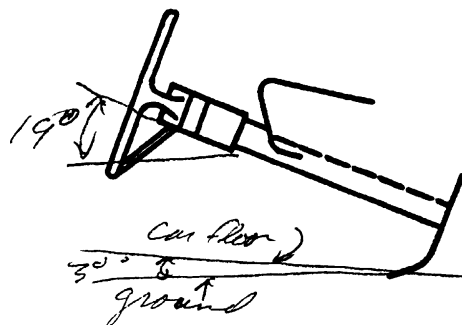
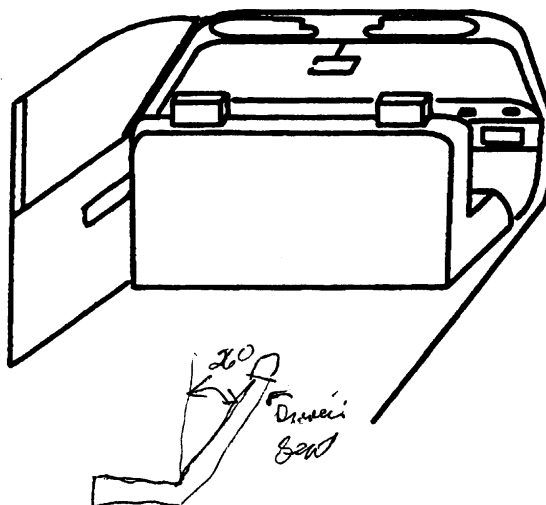
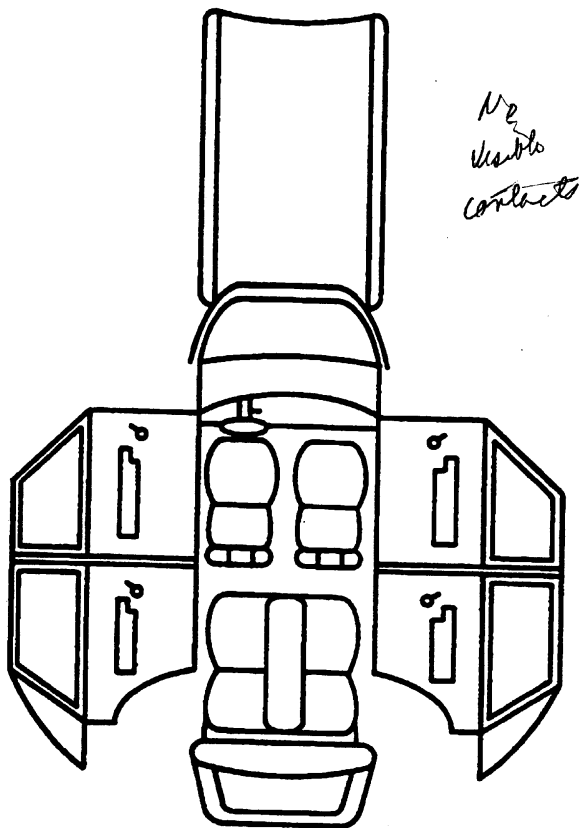
[] Wall-mounted head rest (used behind wheelchair)

[] Other adaptive device (specify): _____

(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

FRONT

- (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tape deck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify): _____
 (019) Other front object (specify): _____

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify): _____
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify): _____
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify): _____
 (155) Head restraint system
 (160) Other occupants (specify): _____
 (161) Interior loose objects
 (162) Child safety seat (specify): _____
 (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify) _____
 (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify): _____
 (409) Additional or relocated switches, (specify): _____
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
 (2) Probable
 (3) Possible
 (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a child safety seat is present, encode the data on the back of this page 11. If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	3	/	3
	B-Evidence of usage	3	/	3
	C-Used in this crash?	NO	/	NO
	D-Proper Use	NA	/	NA
	E-Failure Modes	NA	/	NA
	F-Anchorage Adjustment	None	/	None
SECOND	A-Availability	4	/	4
	B-Evidence of usage	NO	/	NO
	C-Used in this crash?	NO	/	NO
	D-Proper Use	NA	/	NA
	E-Failure Modes	NA	/	NA
	F-Anchorage Adjustment	None	/	None
OTHER	A-Availability	/	/	/
	B-Evidence of usage	/	/	/
	C-Used in this crash?	/	/	/
	D-Proper Use	/	/	/
	E-Failure Modes	/	/	/
	F-Anchorage Adjustment	/	/	/

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	0
	Deployment	/	/	/
	Failure	/	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment
(This Occupant Position)

- (0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	1	1
	B-Use	1	0
	C-Type	2	2
	D-Proper Use	1	0
	E-Failure Modes	1 - Since crash belt in locked position - + handle does not function	0

A-Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

D-Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):

(9) Unknown

E-Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?		
B-Flaps open at tear points?		
C-Flaps damaged?		
D-Air bag damaged?		
E-Source of air bag damage		
F-Air bag tethered?		
G-Air bag have vent ports?		
H-Other occupant contact air bag?		
I-Occupant wearing eyewear?		

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

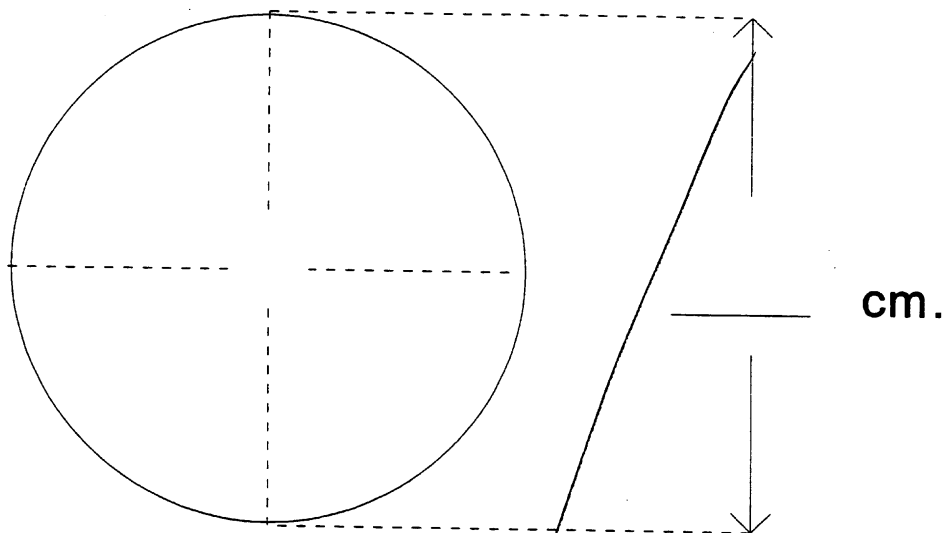
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

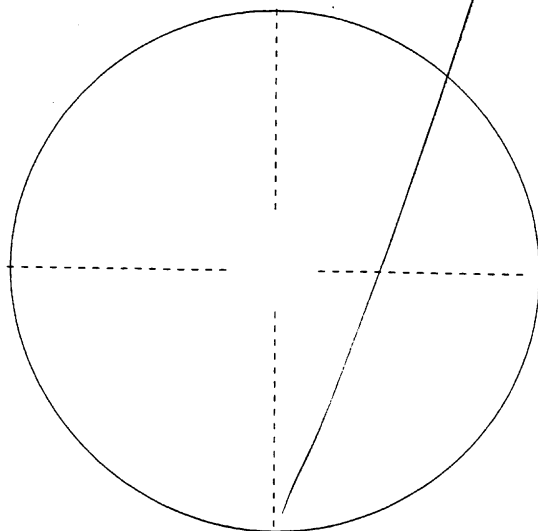
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

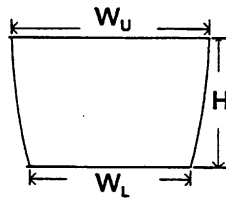


DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____

height (H) _____



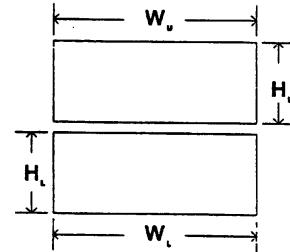
4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width (W_U) _____ width (W_L) _____

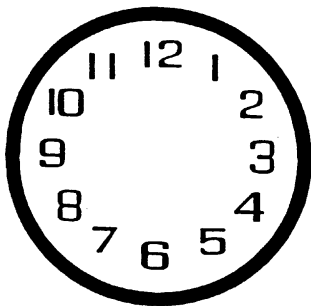
height (H_U) _____ height (H_L) _____



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

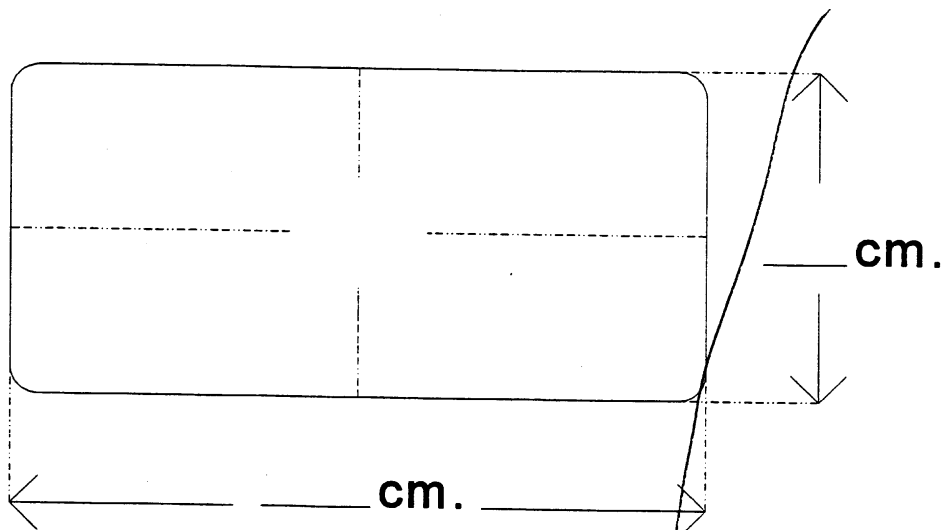
6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

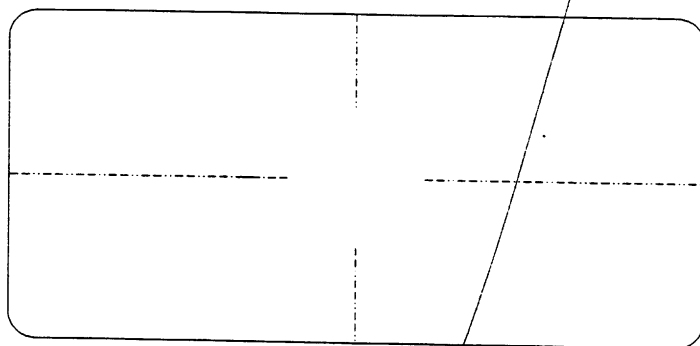


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)

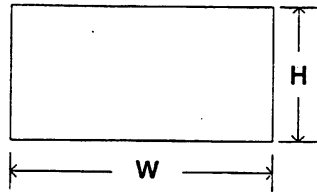


PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

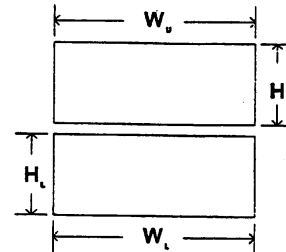
b. Lower Flap

width (W_U) _____

width (W_L) _____

height (H_U) _____

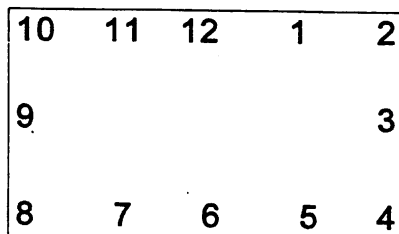
height (H_L) _____



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	Integral	/	Integral
	B-Seat Type	Folding Back of Reduc		Same
	C-Seat Orientation	Forward		
	D-Seat Track Position	* Center		* center/back
	E-Seat Back Incline Pre/Post Impact	Center		Center
	F-Seat Performance	None		None
SECOND	A-Head Restraint Type/Damage	None	/	None
	B-Seat Type	Bucket bench w/ separate folding back		
	C-Seat Orientation	RE F		
	D-Seat Track Position	End		
	E-Seat Back Incline Pre/Post Impact	—		
	F-Seat Performance	None		
THIRD	A-Head Restraint Type/Damage	/	/	/
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage	/	/	/
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

* Seat adjusted 3 1/2" forward of full back + 4" rearward of full front

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other (specify): _____
- (9) Unknown

B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

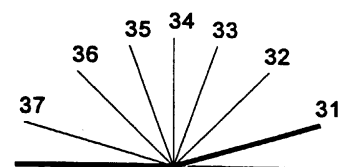
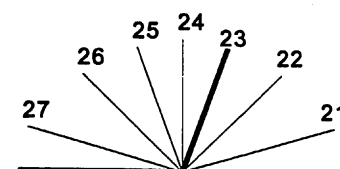
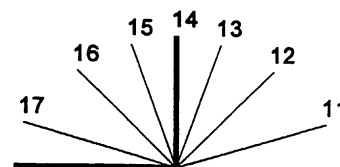
Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage**4. Child Safety Seat Shield Usage****5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes [☐]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [☒] Yes [☐]

Describe entrapment mechanism:

Component(s):

(Note on vehicle interior sketch)

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest centimeter.

(999) Unknown

___ inches X 2.54 = ___ centimeters

8. Occupant's Weight

Code actual weight to the nearest kilogram.

(999) Unknown

___ pounds X .4536 = ___ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

0

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

0

15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

0

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

4

BELT SYSTEM FUNCTION

<p>18. Manual (Active) Belt System Availability <u>3</u></p> <p>(0) None available (1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i> (6) Shoulder belt (lap belt destroyed/removed) (7) Lap belt (shoulder belt destroyed/removed) (8) Other belt (specify): (9) Unknown</p>	<p>22. Manual Shoulder Belt Upper Anchorage Adjustment <u>0</u></p> <p>(0) No manual shoulder belt (1) No upper anchorage adjustment for manual shoulder belt</p> <p><i>Adjustable shoulder Belt Upper Anchorage</i> (2) In full up position (3) In mid position (4) In full down position (5) Position unknown (9) Unknown if position has adjustable upper anchorage adjustment</p>
<p>19. Manual (Active) Belt System Use <u>02</u></p> <p>(00) None used, not available, or belt removed/destroyed (01) Inoperative (specify): (02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify): (12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat—type unknown (18) Other belt used with child safety seat (specify): (99) Unknown if belt used</p>	<p>23. Automatic (Passive) Belt System Availability/Function <u>1</u></p> <p>(0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown</p> <p><i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown</p> <p>24. Automatic (Passive) Belt System Use <u>1</u></p> <p>(0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): (3) Automatic belt use unknown (9) Unknown</p>
<p>20. Proper Use of Manual (Active) Belts <u>1</u></p> <p>(0) None used or not available (1) Belt used properly (2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i> (3) Shoulder belt worn under arm (4) Shoulder belt worn behind back or seat (5) Belt worn around more than one person (6) Lap belt worn on abdomen (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): (8) Other improper use of manual belt system (specify): (9) Unknown</p>	<p>25. Automatic (Passive) Belt System Type <u>2</u></p> <p>(0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System <u>1</u></p> <p>(0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or</p>
<p>21. Manual (Active) Belt Failure Modes During Accident <u>0</u></p> <p>(0) No manual belt used or not available (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other manual belt failure (specify): (9) Unknown</p>	<p>automatic shoulder belt used improperly with child safety seat (specify): (8) Other improper use of automatic belt system (specify): (9) Unknown</p> <p>27. Automatic (Passive) Belt Failure Modes During Accident <u>1</u></p> <p>(0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify): (9) Unknown</p>

POLICE REPORTED RESTRAINT USE

AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 4

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 0

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☐ Unknown if belt used

30. Frontal Air Bag System 0

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment 0
(This Occupant Position)

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag 0
Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First 0
Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System 0
Failure?

(This Occupant Position)

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

(0) Not equipped/not available

(1) No previous accidents

Yes

(2) Previous accident(s) without deployment(s)

(3) One previous accident with deployment

(4) More than one previous accident with at least one deployment

(8) Previous accidents, unknown deployment status

(9) Unknown

36. Type of Air Bag 0

(0) Not equipped/not available

(1) Original manufacturer installed system

(2) Retrofitted air bag

(3) Replacement air bag

(8) Unknown type of air bag

(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

(0) Not equipped/not available

(1) No prior maintenance

(2) Yes, prior maintenance (specify): _____

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 02

(00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

(96) Deployed, unknown event

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

39. CDC For Air Bag Deployment Impact 0

(0) Not equipped/not available

(1) Highest delta V

(2) Second highest delta V

(3) Other non-coded delta V (specify): _____

(6) Deployed, unknown event

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

40. Longitudinal Component of +

Delta V For Air Bag

Deployment Impact - 0.72

(_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(_996) Deployment, unknown longitudinal Delta V

(_997) Not deployed

(_998) Unknown if deployed

(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

(0) Not equipped/not available

(1) No

(2) Yes

(3) Deployed, unknown if flap(s) opened at designated tear points

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

(0) Not equipped/not available

(1) No

(2) Yes (specify): _____

(3) Deployed, unknown if air bag module cover flap(s) damaged

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

43. Was There Damage To The Air Bag? 02

(00) Not equipped/not available

(01) Not damaged

Yes - Air Bag Damage

(02) Ruptured

(03) Cut

(04) Torn

(05) Holed

(06) Burned

(07) Abraded

(88) Other damage (specify): _____

(95) Damaged, details unknown

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 02
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (08) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

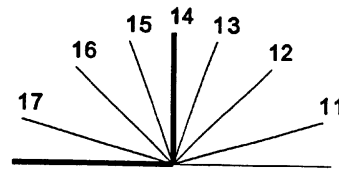
49. Head Restraint Type/Damage by Occupant at This Occupant Position 1
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 02
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 3
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

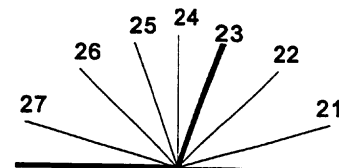
53. Seat Back Incline Prior and Post Impact **23**
 (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

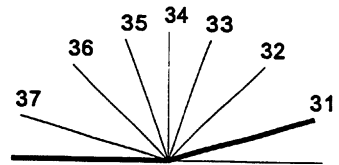
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) **1**
 (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES**61. Injury Severity (Police Rating)**

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment)

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay

- (00) Not Hospitalized
_____ Code the number of days (up through 60)
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost

- _____ Code the number of days
(up through 60) that the occupant
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death**

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death**68. 2nd Medically Reported Cause of Death****69. 3rd Medically Reported Cause of Death**
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood?

- (1) No - blood not given
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination**

- (0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):

- (9) Unknown if belt used

GEORGIA UNIFORM MOTOR VEHICLE ACCIDENT REPORT

BEST AVAILABLE

Date	Day Of Week Sun <input type="checkbox"/> M <input type="checkbox"/> T <input checked="" type="checkbox"/> W <input type="checkbox"/> Th <input type="checkbox"/> F <input type="checkbox"/> S	Time 1807	Off. Arrived	Total Number Of: Vehicles 2 Injuries 1 Fatalities 0	Inside City Of:
Road of Occurrence 1 <input type="checkbox"/> Interstate 2 <input checked="" type="checkbox"/> Lowest St. Rt. 3 <input type="checkbox"/> Co. Road 4 <input type="checkbox"/> City St.					
At Its Intersection With 1 <input type="checkbox"/> Interstate 2 <input type="checkbox"/> Lowest St. Rt. 3 <input checked="" type="checkbox"/> Co. Road 4 <input type="checkbox"/> City St.					
Not At Its Intersection But <input type="checkbox"/> Miles 1 <input type="checkbox"/> North 3 <input type="checkbox"/> East Of: <input type="checkbox"/> Feet 2 <input type="checkbox"/> South 4 <input type="checkbox"/> West 1 <input type="checkbox"/> Interstate 2 <input type="checkbox"/> Lowest St. Rt. 3 <input type="checkbox"/> Co. Road 4 <input type="checkbox"/> City St. 5 <input type="checkbox"/> Co. Line					
And Continuing in the Direction Checked Above The Next Reference Point is 1 <input type="checkbox"/> Interstate 2 <input type="checkbox"/> Lowest St. Rt. 3 <input type="checkbox"/> Co. Road 4 <input type="checkbox"/> City St. 5 <input type="checkbox"/> Co. Line					

Corrected Report
Yes ☐
Suppl. To Original
Yes ☐

Driver # 1	Last Name First Middle	Driver # 2	Last Name First Middle
Address		Address	
City State Zip		City State Zip	
Driver's License No. Class State <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female		Driver's License No. Class State <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	
Posted Speed 55 Insurance Co. Policy No.		Posted Speed 55 Insurance Co. Policy No.	
Year 1991 Make Mitsubishi Model Eclipse Telephone No.		Year 1996 Make Saturn Model SLT Telephone No.	
VIN Vehicle Color Green		VIN Vehicle Color	
Tag # State GA County Year 96		Tag # State County Year 96	
Trailer Tag # State County Year		Trailer Tag # State County Year	
<input type="checkbox"/> Same as Driver Owner's Last Name First Middle		<input checked="" type="checkbox"/> Same as Driver Owner's Last Name First Middle	
Address 16 Eagle Court		Address	
City State GA Zip		City State Zip	
Removed By Driver <input type="checkbox"/> Request <input type="checkbox"/> List		Removed By <input type="checkbox"/> Request <input checked="" type="checkbox"/> List	
Alcohol Test 2 Type Results Drug Test 2 Type Results		Alcohol Test 2 Type Results Drug Test 2 Type Results	
Driver Condition 1 Direction of Travel 3 Vision Obscured 1 Contributing Factors 1		Driver Condition 1 Direction of Travel 4 Vision Obscured 1 Contributing Factors 4	
Vehicle Condition 1 Vehicle Maneuver 5 Pedestrian Maneuver		Vehicle Condition 1 Vehicle Maneuver 1 Pedestrian Maneuver	
Most Harmful Event 11 Vehicle Class 1 Vehicle Type 1		Most Harmful Event 11 Vehicle Class 1 Vehicle Type 1	
Traffic Control 6 Device Inoperative? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Traffic Control 6 Device Inoperative? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Injured Taken To By:

EMS Notified Time EMS Arrival Time Hospital Arrival Time Photos Taken: ☐ Yes ☒ No By:

Report By: Department Report Date: Date Checked:


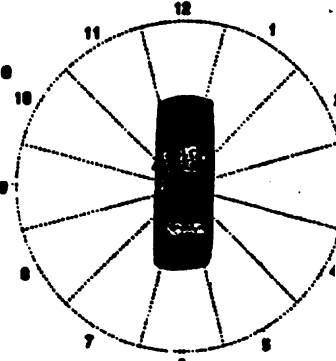
Witness(es): Name Address City State Zip Code Telephone No.

DPS MICROFILM NUMBER (DO NOT WRITE IN THIS SPACE)

COMMERCIAL VEHICLES ONLY

Carrier Name Vehicle #	Carrier Name Vehicle #
Address	Address
City State Zip	City State Zip
Number of Axles G.V.W.R. Fed. Reportable 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Cargo Body Type	Number of Axles G.V.W.R. Fed. Reportable 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Cargo Body Type
Vehicle Config. I.C.C.M.C. # U.S. D.O.T. # Interstate <input type="checkbox"/> Intrastate <input type="checkbox"/>	Vehicle Config. I.C.C.M.C. # U.S. D.O.T. # Interstate <input type="checkbox"/> Intrastate <input type="checkbox"/>
C.D.L.? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No C.D.L. Suspended? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Hazardous Materials? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Released? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	C.D.L.? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No C.D.L. Suspended? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Hazardous Materials? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No Released? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
If YES, Name or 4 Digit Number from Diamond or Box: 1 Digit Number from Bottom of Diamond:	If YES, Name or 4 Digit Number from Diamond or Box: 1 Digit Number from Bottom of Diamond:
Ran Off Road Down Hill Runaway Cargo Loss Or Shift Separation of Units	Ran Off Road Down Hill Runaway Cargo Loss Or Shift Separation of Units

ALCOHOL AND/OR DRUG TEST GIVEN 1 - Yes 2 - No 3 - Refused		PEDESTRIAN MANEUVER 1 Crossing, Not At Crosswalk 2 Crossing At Crosswalk 3 Walking With Traffic 4 Walking Against Traffic 5 Pushing Or Working On Vehicle 6 Other Working In Road 7 Playing In Roadway 8 Standing In Roadway 9 Off Roadway 10 Other		CONTRIBUTING FACTORS 1 No Contributing Factors 2 D.U.J. 3 Following Too Close 4 Failed To Yield 5 Exceeding Speed Limit 6 Disregard Stop Sign/Signal 7 Wrong Side Of Road 8 Weather Conditions 9 Improper Passing 10 Driver Lost Control 11 Changed Lanes Improperly 12 Object Or Animal 13 Improper Turn 14 Parked Improperly 15 Mechanical Or Vehicle Failure 16 Surface Defects 17 Misjudged Clearance 18 Improper Backing 19 No Signal/Improper Signal 20 Driver Condition 21 Driverless Vehicle 22 Too Fast For Conditions 23 Improper Passing Of School Bus 24 Disregard Police Officer 25 Distracted 26 Other		VEHICLE TYPE 1 Passenger Car 2 Pickup Truck 3 Truck Tractor (Bobtail) 4 Tractor/Trailer 5 Tractor W/Twin Trailers 6 Logging Truck 7 Logging Tractor/Trailer 8 Single Unit Truck 9 Panel Truck 10 Van 11 Utility Passenger Veh. 12 Vehicle With Trailer 13 Bus 14 Truck Towing House Trailer 15 Ambulance 16 Motorized Recreational Vehicle 17 Motorcycle, Scooter, Minibike 18 Moped 19 Pedalcycle, Bicycle 20 Farm or Const. Equip. 21 All Terrain Vehicle 22 Other	
TYPE TEST 1-Blood 2-Breath 3-Urine 4-Other		FIRST HARMFUL EVENT/MOST HARMFUL EVENT NON-COLLISION 1 Overtake 2 Fire/Explosion 3 Immersion 4 Jackknife 5 Other Non-Collision		TRAFFIC CONTROL 1 No Control Present 2 Traffic Signal 3 RR Signal/Sign 4 Warning Sign 5 Stop Or Yield Sign 6 No Passing Zone 7 Lanes 8 Other			
DRIVER CONDITION 1 Not Drinking 2 Not Known If U.I. 3 Drinking, Not Impaired 4 U.I. Alcohol 5 U.I. Drugs 6 U.I. Alcohol & Drugs 7 Physical Impairment 8 Apparently Fell Asleep		COLLISION WITH OBJECT NOT FIXED 6 Pedestrian 7 Pedalcycle 8 Railway Train 9 Animal 10 Parked Motor Veh. 11 Motor Vehicle In Motion 12 Motor Vehicle In Motion - In Other Roadway 13 Other Object (Not Fixed) 14 Deer		CARGO BODY TYPE 1 Van (Enc. Box) 2 Auto Carrier 3 Bus 4 Dump 5 Garbage/Refuse 6 Flatbed 7 Cargo Tanker 8 Concrete Mixer 9 Other			
DIRECTION OF TRAVEL 1-North 2-South 3-East 4-West		COLLISION WITH FIXED OBJECT 15 Impact Attenuator 16 Bridge Pier/Abutment 17 Bridge Parapet End 18 Bridge Rail 19 Guardrail Face 20 Guardrail End 21 Median Barrier 22 Highway Traffic Sign Post 23 Overhead Sign Support 24 Luminaire/light Support 25 Utility Pole 26 Other Post 27 Culvert 28 Curb 29 Ditch 30 Embankment 31 Fence 32 Mailbox 33 Tree 34 Other Fixed Object		VEHICLE CONFIGURATION 1 Bus (Seating For More Than 15 Passengers) 2 Single Unit Truck: 2 Axles 3 Single Unit Truck: 3 Or More Axles 4 Truck/Trailer 5 Truck Tractor (Bobtail) 6 Tractor/Trailer 7 Tractor With Twin Trailers 8 Unknown Heavy Truck (Cannot Classify)			
VISION OBSCURED BY 1 Not Obscured 2 Headlights 3 Sunlight 4 Parked Vehicle 5 Trees, Bushes 6 Rain, Snow, Ice 7 On Windshield 7 Other		VEHICLE CLASS 1 Privately Owned 2 Police 3 Fire 4 School 5 Other Govt. Owned 6 Military 7 Commercial Veh. (For Acc. Reporting Purposes Only) 8 Other					
VEHICLE CONDITION 1 No Known Defects 2 Tire Failure 3 Brake Failure 4 Improper Lights 5 Steering Failure 6 Slick Tires 7 Other							
VEHICLE MANEUVER 1 Turning Left 2 Turning Right 3 Making U-turn 4 Stopped 5 Straight 6 Changing Lanes 7 Backing 8 Parked 9 Passing 10 Negotiating A Curve 11 Entering/Leaving Parking 12 Entering/Leaving Driveway							

TRAFFIC-WAY FLOW 1 Two-way Trafficway With No Physical Separation 2 Two-way Trafficway With A Physical Separation 3 Two-way Trafficway With A Physical Barrier 4 One-way Trafficway		LOCATION AT AREA OF IMPACT 1 On Roadway 2 On Shoulder 3 Off Roadway 4 Median 5 Ramp 6 Gore		AGE 00 - Up To One Year 01 - 97 Actual Age 98 - Ninety-eight Or Older 99 - Unknown		SEX M- Male F- Female	
WEATHER 1 Clear 2 Cloudy 3 Rain 4 Snow 5 Sleet 6 Fog 7 Other		ROAD COMPOSITION 1 Concrete 2 Black Top 3 Tar And Gravel 4 Dirt 5 Gravel 6 Other		INJURY CODE 0 Not Injured 1 Killed 2 Serious 3 Visible 4 Complaint		SEATING POSITION  8 8 8	
SURFACE CONDITION 1 Dry 2 Wet 3 Snowy 4 Icy 5 Other		CONTRIBUTING ROAD DEFECTS 1 No Defects 2 Defective Shoulders 3 Holes, Deep Ruts, Bumps 4 Loose Material On Surface 5 Water Standing 6 Road Under Construction 7 Running Water 8 Other		TAKEN FOR TREATMENT 1-Yes 2- No		POINTS OF INITIAL CONTACT Use: 00 Overtaken 13 Top 14 Undercarriage	
LIGHT CONDITION 1 Daylight 2 Dusk 3 Dawn 4 Dark - Lighted 5 Dark - Not Lighted		ROAD CHARACTER 1 Straight And Level 2 Straight On Grade 3 Straight On Hillcrest 4 Curve And Level 5 Curve On Grade 6 Curve On Hillcrest		EJECTION 1 Not Ejected 2 Trapped 3 Totally Ejected 4 Partially Ejected		 BEST AVAILABLE	
MANNER OF COLLISION 1 Angle 2 Head On 3 Rear End 4 Sideswipe - Same Direction 5 Sideswipe - Opposite Direction 6 Not A Collision With A Motor Vehicle		DAMAGE TO VEHICLE 1 None 2 Slight 3 Moderate 4 Extensive 5 Fire Present		SAFETY EQUIPMENT 0 None Used 1 Shoulder Belt 2 Lap Belt 3 Lap And Shoulder Belt 4 Child Safety Seat (Properly Used) 5 Child Safety Seat (Improperly Used) 6 Motorcycle Helmet 7 Bicycle Helmet 8 Unknown			
				EXTRICATION (EQUIPMENT USED) 1 - Yes 2 - No			
				AIR BAG FUNCTION 0 No Air Bag In Vehicle 1 Deployed Air Bag 2 Non-Deployed Air Bag			

NOTIFY IN CASE OF EMERGENCY	REL	PHONE	ADDRESS—CITY, STATE, ZIP
EMERGENCY PHYSICIAN	PERSONAL PHYSICIAN	COMMENTS	
ADMITTED/REFERRED TO	CHIEF COMPLAINT	AUTO ACCIDENT	
	MULTI-TRAUMA INJURY	<input type="radio"/> YES <input type="radio"/> NO	

EMERGENCY DEPARTMENT CONSENT FOR TREATMENT

AGREEMENT FOR EMERGENCY DEPARTMENT SERVICES

The examination and treatment which you receive on any emergency basis is not intended as a substitution or replacement for complete medical care. Please seek further care as indicated on the reverse side of this form.

ABOUT YOUR BILL You will receive a bill from the hospital for provision of the health-care facility, including staff and equipment, and for any supplies or medicines utilized. You will also receive a bill from the emergency physician/specialist who provides your professional care. If you have an E.K.G., X-Ray, or complicated lab specimen (one that requires interpretation by a pathologist), then (a) the interpretation rendered on an emergency basis is a preliminary interpretation, (b) a final interpretation will be made as soon as possible by the appropriate specialist who will bill for his/her services separately, and (c) if there is a discrepancy or variance in these interpretation, you will be notified (it is your responsibility to provide the hospital with a correct address and telephone number where you can be reached for this purpose).

YOUR RESPONSIBILITY FOR PAYING FOR SERVICES Your insurance policy is a contract between you and your insurance company. The hospital cannot actually charge your insurance company for services rendered to you, but can only send them a copy of the charges. The hospital cannot guarantee that your insurance company will pay your claim. When you sign an authorization for an insurance company to pay benefits to the hospital, upon receipt of the payment credit will be given to your account. Your insurance company will notify you of the amount paid. When you sign the claim form and/or the consent below, you are authorizing the hospital to furnish information (including copies of medical records relative to this visit) to the insurance company listed on the registration sheet in the form of a bill.

-CONSENT FOR MEDICAL TREATMENT Upon my registration, I do voluntarily consent to such hospital care encompassing diagnostic and therapeutic procedures and medical treatment, as may be ordered by my physician, his assistants or designees, as is necessary in his judgement. I realize the physicians furnishing services to the patient, including radiologists, anesthesiologists, cardiologists, pathologists, and emergency physicians are independent contractors and are not employees or agents of the hospital. These contractors will bill independently for their services when rendered.

-AUTHORIZATION TO RELEASE INFORMATION Upon my registration, I agree that my physician and hospital authorities may give out written or verbal information concerning my hospital records to any insurance carrier or agent or agent that is duly responsible to the hospital or patient, whether government or private agency.

-AUTHORIZATION TO PAY INSURANCE BENEFITS Upon my registration, I hereby authorize payment directly to the hospital of all hospital's benefits otherwise payable to me for the period of hospitalization, but not to exceed the hospital's total charges. The hospital files insurance claims as a courtesy service and any disputes with any insurance company regarding terms of coverage will be handled by the insured. In the event I do not choose to assign payment of benefits to the hospital, I understand that my account will be handled as a private pay account.

-FINANCIAL AGREEMENT The undersigned hereby agrees to pay all statements not covered by the insurance for the services rendered by this hospital upon discharge. Any balance not paid within thirty (30) days after the date of discharge will be considered in default unless financial arrangements have been made in writing with the Hospital's Business Office. The undersigned also agrees to be solely responsible for all collection fees, attorney's fees, and court costs necessary to collect payment on any portion of the delinquent balance.

-AUTHORIZATION FOR COMMUNICABLE DISEASE TESTING I hereby authorize and consent to my blood being tested for communicable diseases, including but not limited to HIV (AIDS virus), if any other person is exposed to my blood or bodily fluids as a result of providing or assisting with my care. (If the undersigned does not consent to such testing, initial here _____.)

X

SIGNATURE OF PATIENT OR AUTHORIZED REPRESENTATIVE

DATE

WITNESS

DATE

TRIAGE ASSESSMENT FORM

BEST AVAILABLE

PRIORITY:
URGENT

II

PATIENT:
DOB :
SEX :
ED PHYS:
PRIV MD:

Date:

Presentation Time: 19:08

Triage Time: 19:08

Arrival Mode: ST-EMS

Weight: 019 lbs. 8.6 kgs

LMP:

Last Tetanus: N/A

Chief Complaint: MVA--MINOR INJURY

Brief Assessment:

PT TO ER VIA EMS AFTER BEING IN MVA, IN WHICH PT WAS
RESTRAINED IN CAR SEAT. PT HAS HEMATOMA TO HEAD AND L GAZE.
PT AWAKE ALERT CRYING AND APPEARS TO RECOGNIZE FAMILY.
PERRL.

Vital Signs

T. 0.0
P. 200
R. 36
BP. 000/000

Plan

WR LA

ER *Ln* XR

Pre-Hospital Treatment:
NONE

Past Medical History:
35 WK PREMIE

Allergies:
NKA

Medicines:
NONE

Nurse Signature: *X* Triage Nurse:

TESTS ORDERED

Code	Dep	Order#	Description	Comments
14487	428	9367958	X C-SPINE COMPLETE	
71020	428	9367957	X CHEST PA & LAT ROUTINE	
35028	436	9367956	L CBC	
30007	436	9367955	L CHEM-7 (MED 8***A)	
32015	436	9367954	L URINALYSIS ROUTINE	
10915	480	9367953	ED CARDIAC MONITOR	
00075	480	9367952	ED DYNAMAP	
00080	480	9367951	ED PULSE OX	

15 19:10

ALLERGIES

CHIEF COMPLAINT

CURRENT MEDICATIONS

PHYSICIAN H & P

EXAM TIME

WT

LmP

TET

T

P

R

BP

/

VIS ACUITY

OD
20/OS
20/

ME ERED	TIME DONE	PROCEDURE	TIME IF REPEATED
------------	--------------	-----------	---------------------

ABG

AMYLASE

B-HCG

CHEM 7

CARD ENZ

CBC

PT/PTT

UA 1 bag 12

EKG

CXR

ET head 12

C-spine at

IE RED	TIME DONE	TREATMENT/ MED	TIME IF REPEATED
-----------	--------------	-------------------	---------------------

SDCC bolus 12

IV access 24gm @ 12

22gm @ 12 AC

DIAGNOSIS

PHYSICIAN SIGNATURE

RSE
ATURE

EMERGENCY ROOM ASSESSMENT RECORD

IDENTIFYING DATA

Name _____ Hospital Number 196 Date _____ Time 1845
 Head Circumference _____ Weight _____ Height/Length _____
 Immunizations up to date? Yes ☐ No ☐

If not why? _____ Social Services Contacted _____

Social History: Who does the patient live with? mother
 Who cares for the patient? mother

Educational History: Is the patient able to read? Yes ☐ No ☒
 Is the patient able to write? Yes ☐ No ☒
 Highest grade completed _____
 Parents of children can read and write? Yes ☒ No ☐

160
36

PAST HISTORY

☐ Asthma/COPD ☐ Diabetes ☐ Smoker ☐ Hypertension ☐ Heart Disease ☐ ETOH ☐ Liver Disease ☐ Musculoskeletal Disease ☐ Seizures
☐ Stroke ☐ Ulcers ☐ FHx _____ ☐ Surgery (Type/Date) _____ ☒ Other 35wK Premie

NEUROLOGICAL

☒ Alert ☐ Oriented X 3 ☐ Cooperative ☒ Uncooperative ☒ Restrained
☐ Awake but Confused ☐ Agitated ☐ Unresponsive ☐ Decerebrate
☐ Combative ☐ To Verbal ☐ To Pain ☐ Decorticate
 Responds ☒ No ☐ Brisk ☐ Sluggish ☐ Fixed ☐ Pinpoint ☐ Dilated
 Posturing ☒ No
 Pupils _____
 Rt _____ Lt _____

Extremities
 Movement
 Sensation
 Movement 0=None 1-Barely Breaks Gravity 2-Weak 3-Strong
 Sensation NR-No Response DP-Deep Pain MP-Moderate Pain LT-Light Touch

CARDIOVASCULAR

Skin ☒ Warm ☒ Dry ☐ Cool ☐ Hot ☐ Moist ☐ Diaphoretic
 Color ☐ Pink ☒ Pale ☐ Ashen
☐ Flushed ☐ Cyanotic ☐ Jaundiced
 Capillary Refill ☒ <2 Secs (Normal) ☐ >2 Secs (Delayed)
 Turgor ☒ Normal ☐ Decreased
 Pulses
 Carotid _____
 Brachial _____
 Radial _____
 Femoral _____
 Popliteal _____
 Dorsalis Pedis _____
 S-Strong W-Weak D-Doppler A-Absent

RESPIRATORY

Airway ☒ Clear ☐ Other _____
 Effort ☒ Unlabored ☐ Labored ☐ Mildly ☐ Severely
☐ Retractions ☐ Nasal Flaring ☐ Stridor
 Cough ☒ None ☐ Productive ☐ Non-Productive
 Lung Sounds
 Clear _____
 Wheezing _____
 Rales _____
 Rhonchi _____
 Decreased _____
 Absent _____

GASTROINTESTINAL

☒ Soft ☐ Flat ☐ Rigid ☐ Distended
☐ Non-Tender ☒ Present ☐ Absent
 Bowel Sounds _____

GENITOURINARY

☒ Not Applicable
 Urine ☐ Colorless ☐ Yellow ☐ Red ☐ Brown ☐ Cloudy
☐ Anuria ☐ Dysuria ☐ Hematuria ☐ Frequency ☐ Urgency
 Vaginal D/C ☐ No ☐ Yes (Type) _____ LMP _____

MUSCULOSKELETAL

☐ Not Applicable
 Wounds (Lacerations, Abrasions, Avulsions, Penetrations, Burns)
 Pain NO OBVIOUS INJURY
 Deformity _____
 Edema (Swelling, Crepitus, Subcutaneous Emphysema) _____
 Scars _____

PRE-HOSPITAL CARE

☐ CPR ☐ Mast ☐ No ☐ Yes ☒ None
☐ Intubated ☐ Not Inflated ☐ IV Type _____ Amt Infused _____
☐ Ambu-Assist ☐ Legs Inflated ☐ Medication _____ Amt _____ Route _____
☐ Mask ☐ Abd Inflated ☐ C-Collar _____
☐ Nasal Cannula ☐ Backboard _____
☐ O2 lpm _____ % ☐ Splint _____

VALUABLES (Clothing/Medications, etc.)

List _____ Disposition NONE

RN Signature _____

NURSING DIAGNOSIS (Number in order of priority. Each patient must have at least one selected.)

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Airway Clearance, Ineffective | <input type="checkbox"/> Communication Impaired | <input type="checkbox"/> Infection, Potential | <input type="checkbox"/> Self Care Deficit |
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Coping, Ineffective | <input type="checkbox"/> Injury, Potential | <input type="checkbox"/> Skin Integrity Impairment |
| <input type="checkbox"/> Breathing Patterns, Ineffective | <input type="checkbox"/> Fluid Volume, Alteration in | <input type="checkbox"/> Knowledge Deficit | <input type="checkbox"/> Thought Processes, Alteration in |
| <input type="checkbox"/> Cardiac Output, Decreased | <input type="checkbox"/> Gas Exchange, Impaired | <input type="checkbox"/> Mobility Impaired | <input type="checkbox"/> Tissue Perfusion, Alteration in |
| <input type="checkbox"/> Comfort, Alteration in | <input type="checkbox"/> Hyperthermia (Fever) | <input type="checkbox"/> Non-Compliance | |
| <input type="checkbox"/> Other | | <input type="checkbox"/> Other | |

Dx	Patient Goal/Expected Outcome by Discharge	Goal Eval	RN	Key
#1				M = Met goal
#2				N = Not met
#3				E = Evaluation
#4				in notes

TIME	TEMP	PULSE	RESP	BLOOD PRESSURE	PUPILS L / R	CARDIAC RHY	CAP REFILL	GLASGOW TRAUMA SCORE

PEDIATRIC TRAUMA SCORECARD

COMPONENT	+ 2	+ 1	- 1	SCORE
SIZE	> 20 kg / 44 lbs.	10-20 kg / 22-44 lbs.	< 10 kg / 22 lbs.	
AIRWAY	NORMAL	ORAL OR NASAL AIRWAY	INTUBATION	
CNS	AWAKE	OBTUNDED	COMATOSE	
SYSTOLIC BP	> 90mmHg	90-50mmHg	< 50mmHg	
OPEN WOUND	NONE	MINOR	MAJOR	
SKELETAL	NONE	SINGLE SIMPLE	OPEN MULTI FX's	

TOTAL SCORE OF 8 OR LESS = TRAUMA PATIENT

GLASGOW COMA SCALE**TRAUMA SCORE**

GLASGOW COMA SCALE		TRAUMA SCORE	
Eye	Spontaneous 4	GLASGOW COMA SCALE (GCS)	14-15 5
Opening	To voice 3		11-13 4
Response	To pain 2	(Total points from above)	8-10 3
	None 1		5-7 2
Best Verbal Response	Oriented 5	Respiratory Rate	3-4 1
	Confused 4		10-24/min 4
	Inappropriate words 3		25-35/min 3
	Incomprehensible sounds 2		36/min or greater 2
	None 1		1-9/min 1
Best Motor Response	Obeys command 6	Respiratory Expansion	None 0
	Localizes pain 5		Normal 1
	Withdraws (pain) 4		Retractive/None 0
	Flexion (pain) 3	Systolic Blood Pressure	90 mm Hg or greater 4
	Extension (pain) 2		70-89 mm Hg 3
	None 1		50-69 mm Hg 2
Total	Apply this score to GCS portion of Trauma Score below		0-49 mm Hg 1
			No Pulse 0
		Capillary Refill	Normal 2
			Delayed 1
			None 0
		Total Trauma Score	1-16

Time	Nurses Reassessment	Signature
1845	upon Arr in ER - c- Traction was obtained and pt placed in full spinal immobilization 24 gauge IV (R) hand 50 cc Bolus given lab obtained from (L) femoral pop R - Spunk PT has (L) gauge - PEARLA - Brown Swelling (R) frontal region of head 1910 PT To CT 1930 PT returned to ER Awake per GSC is 14 PT at this time woke around, track & follow but when @ sent has (L) side Gaze. 1945 C-spine shot - K 1955 Report To covering RN	

Printed: 55 STAT PRINTING

PAGE: 1 of 1

8

Patient name:

M.R.N.:

Id no :

Location : EMERGENCY room: 0000

Dob: 1996 Age: M5 Sex: M

Order Id:

Date&Time Ordered : 19:13

Adm. date: 96

Surg. date:

Att. physician:

Req. physician:

HEMATOLOGY

TEST-NAME	RESULT	ABN.	NRML-RANGE	UNITS
COLLECTED: 09/18/96 19:15				
AUTOMATED HEMATOLOGY				
WBC	23.2	H	5.0-12.0	thou/cmm
RBC	3.22	L	4.70-6.10	mill/cmm
HGB	10.5	L	14.0-18.0	g/dl
HCT	29.8	L	42.0-52.0	%
MCV	92.6		80.0-94.0	fl
MCH	32.6	H	27.0-31.0	pg
MCHC	35.1		32.0-36.0	g/dl
RDW	12.3		11.5-14.5	%
PLATELET	339		130-400	thou/cmm
MPV	7.6		7.4-10.4	fl
DIFFERENTIAL & MORPHOLCGY				
LYMPH %	74.6	H	35.0-70.0	%
MONO %	10.5	H	1.7-9.3	%
NEUT %	14.00	L	30.00-75.00	%
EOS %	0.7		0.0-10.0	%
BASO %	0.2		0.0-2.0	%
LYMPH, TOTAL	17.4	H	1.2-3.4	thou/cmm
MONO, TOTAL	2.4	H	0.1-0.6	thou/cmm
NEUT, TOTAL	3.2		1.4-6.5	thou/cmm
EOS, TOTAL	0.2		0.0-0.7	thou/cmm
BASO, TOTAL	0.0		0.0-0.2	thou/cmm
RBC MORPHOLOGY	APPEARS NORMAL			

* - new results

Patient name:

MRN:

Room: 0000

KEY FOR ABNORMAL COLUMN: L-LOW, H-HIGH, AB-ABNORMAL, C-CRITICAL, T-TOXIC

Printed: STAT PRINTING

PAGE: 1 of 1

8

Patient name: :
Id no :
Location : EMERGENCY room: 0000
Dob: ; Age: M5 Sex: M
Order Id:

M.R.N.:

Date&Time Ordered : 19:13
Adm. date:
Surg. date:
Att. physician:
Req. physician:

CHEMISTRY

TEST-NAME	RESULT	ABN.	NRML-RANGE	UNITS
COLLECTED: 09/18/96 19:15				
AUTOMATED CHEMISTRY				
SODIUM	142		137-150	meq/l
POTASSIUM	4.0		3.5-5.3	meq/l
CHLORIDE	103		99-111	meq/l
BICARBONATE	22		22-30	meq/l
GLUCOSE	147	H	65-115	mg/dl
UREA NITROGEN	11		5-25	mg/dl
CREATININE	0.4	L	0.5-1.5	mg/dl

* - new results

Patient name: N MRN: Room: 0000

KEY FOR ABNORMAL COLUMN: L-LOW, H-HIGH, AB-ABNORMAL, C-CRITICAL, T-TOXIC

LABORATORY REPORTS

PLACE TOP OF REPORT #3 HERE

1

PLACE TOP OF REPORT #2 HERE

NBPm	TIME	HR	RESP	SpO2	NBP _s	NBP _d	NBP _m	TIME	HR	RESP	SpO2	NBP _s	NBP _d	NBP _m
	19:15	215	30	94				20:10	190	29	100	89	46	66
	19:20	161	65	100				20:15	223	39	97			
	19:25	132	34	100										
	19:30	158	40	100										
	19:35	162	36	100										
	19:40	205	41	100										
	19:45	195	37	96	31	21	25							
	19:50	225	71	100	70	54	61							
	19:55	234	49	95										
	20:00	158	40	100	110	57	87							
	20:05	168	36	100	97	43	62							

PLACE TOP OF REPORT #1 HERE

MONS/

DATE:

TIME: 19:42:27

FULL DISCLOSURE

HR 177 BPM

RESP 51 RPM

NIBP SYS 29 mmHg

NIBP MEAN (24) mmHg

NIBP DIAS 21 mmHg

SpO2 99 %

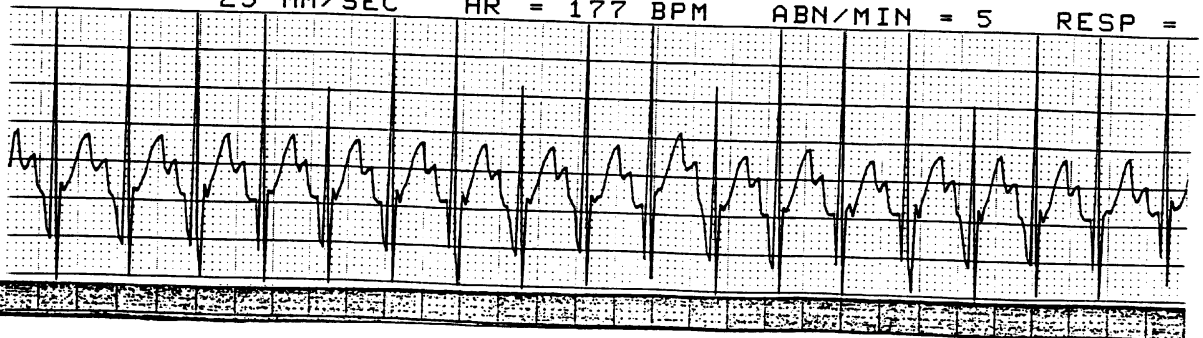
PROG REV: 3.5.1

25 MM/SEC

HR = 177 BPM

ABN/MIN = 5

RESP =



PATIENT TRANSFER ORDER

Patient Name:

Physician Name:

I direct that this patient be transferred consistent with these instructions:

Destination Hospital:

Accepting Physician:

CANNON

Mode of Transfer:

☒ Ambulance/ALS☐ Ambulance/BLS☐ Helicopter☐ Other _____

Required Life Support:

PALSRequired Personnel to
Accompany Patient:Paramedic

Name of Person Accepting for Hospital:

Name

Date



Available Space Confirmed



Available Personnel Confirmed

Conducted by: _____

Name of Transfer Service or Agency:

EMS

Conducted by: _____

Date: _____

Time: 2000Time of Arrival: 2012Time of Transfer: 20

Notes:

Medical Orders carried out at

Bulloch Memorial Hospital

CT C-spine, CXR, CBC, Chem 7, - U-Bag in place
(head)Radio contact is to be maintained during transfer, with on-line medical
direction over the patient's care to be exercised by:

This Hospital



Destination Hospital



Other _____

Copies of all medical records to accompany patient: (circle which records sent)

EKG

CXRCBC

U/A

Master Chemistry

PT/PTT

Others: Chem 7, CT head

Date: _____, 1996

Time: 7:56PM

Imprint I.D.

Physician's Signature: X

CONSENT FOR TRANSFER

Name: L

DOB:

Pt#: ----

SECTION I: PATIENT CONSENT (This section must be signed by the patient and/or responsible individual)

I understand that _____ diagnosis is skull fr.
The risks involved in the transfer have been explained to me as well as the risks of foregoing transfer and I accept full responsibility for such a transfer.

Summary of risks and benefits (to be completed by physician):

needs neurology observation & possible surgery
not available here

I release _____ and its agents from liability as a result of this transfer.

Signature

Relationship

Date

Witness (licensed personnel)

Licensure

Date

EMERGENCY DEPARTMENT CONSENT FOR TREATMENT

719.45
724.2
care.

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DATE _____

WITNESS

DATE _____

PRIORITY:
URGENT

II

PATIENT:
DOB :
SEX :
ED PHYS:
PRIV MD:

PT #:
26 YRS MO:

Date:

.an

Presentation Time: 19:20

Triage Time: 19:50

Arrival Mode: *AMB-POV

Weight: 000 lbs. 0.0 kgs

LMP: N/A

Last Tetanus: N/A

Chief Complaint: MVA--MINOR INJURY

Vital Signs

T. 101.4

P. 138

R. 24

BP. 160/092

Plan

WR

LA

ER

XR

Brief Assessment:

RESTRAINED DRIVER T BONE MVA; C/O PAIN IN THE L FOREARM;
C/O MILD DISCOMFORT IN THE HIPS AND LOWER BACK; SKIN W&D;
ANXIOUS; CRYING; A&OX4; IN RM 1 W/ CHILD

Pre-Hospital Treatment:

NOT SINCE PREG; ON DEPO PROVERA

Past Medical History:

PREECLAMPSIA IN PREG

Allergies:

NKA

Medicines:

DEPO PROVERA

Nurse Signature: _____

Triage Nurse: _____

TESTS ORDERED

Code	Dep	Order#	Description	Comments
			X FOREARM ROUTINE	LEFT PT IN RM 1

PATIENT:
DOB/AGE:
PT ADMN:
MED REC:
ORDER #:

PT CLASS: ER
RACE/SEX: CAUCASIAN F
ROOM/BED:
PRIORITY: ROUTINE
PHYSICIAN:

EXAM DATE:

HISTORY: MVA--MINOR INJURY

LEFT FOREARM-AP AND LATERAL, The osseous structures
are intact. No acute bony abnormality is seen. The soft
tissues are unremarkable.

IMPRESSION: No acute bony abnormality identified.

Thank you for your referral.

TECH:
DATE DICTATED
DATE TRANSCRIBED
TRANSCRIPTIONIST

SIGNED BY: _____

D

MEDICAL RECORDS

PATIENT:
DOB/AGE:
PT ADMN:
MED REC:
ORDER #:

PT CLASS: ER
RACE/SEX: CAUCASIAN F
ROOM/BED:
PRIORITY: ROUTINE
PHYSICIAN:

EXAM DATE:

HISTORY: MVA--MINOR INJURY

LEFT HAND, -96: There is a ring artifact projected over the mid aspect of the proximal phalanx of the 4th digit which obscures the bone in this area other than this area which is not seen due to artifact. No fracture, dislocation or radiopaque foreign body is identified.

IMPRESSION: No fracture seen with the limitation as described above.

Thank you for your referral.

TECH:

DATE DICTATED

DATE TRANSCRIBED

TRANSCRIPTIONIST BRM

SIGNED BY: _____

RADIOLOGIST

PAGE 1 OF 1

MEDICAL RECORDS

TYPE I		SOCIAL SECURITY NO. UNAVAILABLE		MEDICAL RECORDS NO.											
AM	FC	SPECIAL HANDLING		SEX M	RACE 1	M/S S	SRC 4	CAT UR	CLERK AW	BIRTHDATE	AGE 5M	ADMIT DATE	TIME 21:3		
FAMILY CA.		ATTENDING PHYSICIAN				MED. SERV.		LOS 6		DISCHARGE DATE -96 123		TIME			
PATIENT ADDRESS										COUNTY OF RESIDENCE					
BROUGHT BY		NAME OF SPOUSE		RELIGION BAPTIST						COUNTY AND STATE OF BIRTH					
ACCIDENT DESCRIPTION AND DATE A				NAME AT LAST ADMIT				PREV. ADMIT DATE		EMPLOYER PHONE					
EMPLOYER NAME CHILD				EMPLOYER ADDRESS											
EMERGENCY CONTACT				RELATIONSHIP TO PATIENT GRANDPARENT				EMERGENCY PHONE							
GUARANTOR NO.		GUARANTOR NAME (LAST, FIRST, MI)				RELATIONSHIP TO GUARANTOR SON				GUARANTOR SOCIAL SECURITY NO.					
GUARANTOR ADDRESS LINE 1 RD				GUARANTOR ADDRESS LINE 2				GUARANTOR ADDRESS LINE 3							
GUARANTOR EMPLOYER NAME HOMEMAKER				GUARANTOR EMPLOYER ADDRESS LINE 1				GUARANTOR EMPLOYER ADDRESS LINE 2							
GUARANTOR HOME PHONE		GUARANTOR EMPLOYER PHONE		PRECERTIFICATION NO.		DAYS		CBD							
INSURANCE COMPANY MEDICAID		GROUP NAME MEDICAID I/P		GROUP NUMBER		POLICY NUMBER		RELATIONSHIP TO INSURED PATIENT/SELF							
1		2		3											

COMMENTS: PT IS A MINOR PT RM 753

RAW

DIAGNOSTIC IMPRESSION:
FRACTURED SKULL

DIAGNOSES/PROCEDURES

CONSULTATIONS

PHYSICIAN	MED. SERV.	PHYSICIAN	MED. SERV.	PHYSICIAN	MED. SERV.

DISPOSITION

- | | |
|---|--|
| <input checked="" type="checkbox"/> HOME OR SELF CARE | <input type="checkbox"/> LEFT AGAINST MEDICAL ADVICE |
| <input type="checkbox"/> TRANSFERRED TO OTHER SHORT TERM HOSPITAL | <input type="checkbox"/> DIED UNDER 48 HRS. |
| <input type="checkbox"/> TRANSFERRED TO SNF | <input type="checkbox"/> DIED OVER 48 HRS. |
| <input type="checkbox"/> TRANSFERRED TO ICF | |
| <input type="checkbox"/> TRANSFERRED TO OTHER INSTITUTION | AUTOPSY |
| <input type="checkbox"/> HOME UNDER CARE OF HOME HEALTH SERVICE | <input type="checkbox"/> YES <input type="checkbox"/> NO |

ATTENDING PHYSICIAN SIGNATURE

MEDICAL RECORD

Discharge Weight _____

Medications to be taken at home:

[illegible]

Instructions given on food / drug interactions? ☐ Yes If not, why?

Diet Formula as at Dinner

Activity Level 1 Diet as on at Home

Instructions given? Yes ☐ No ☐

Special Instructions

Follow-up Appointment 5/22/20

Referrals to internal / outside agencies

Patient left via W/C at 12.30

with

I have read and understand the above instructions and have received any valuables or medicines I brought into the hospital.

Nurse's Signature

Date _____

Patient / Significant Other

Date _____

White Patient / family
Yellow Chart

31387

Discharge Summary

PAGE 1

DISCHARGE SUMMARY

Age: 005M

DATE OF ADMISSION:

DATE OF DISCHARGE:

ADMISSION DIAGNOSIS:

1. Closed head injury with skull fracture and intracranial contusion.

SUMMARY:

This five-month-old child was riding in the front seat with his back facing forward when the vehicle was involved in an accident. The air bag exploded, striking the child in the right occipitoparietal region. He was initially seen in the Emergency Room at Statesboro and had a CT scan done which revealed a fracture of the right parieto-occipital region. He also had some contusion on the left frontotemporal area with a small subdural. The patient was transferred here. He, after admission, had nystagmus and a large subgaleal hematoma and effusion over the right scalp area. The patient remained in the NICU. His nystagmus and irritability gradually improved. At the time of discharge, he was awake. His nystagmus had pretty much cleared. He was to continue on a decreasing dose of Decadron and return to my office in a couple of weeks for followup evaluation.

an involuntary, rapid, rhythmic movement of the eyeball, which may be horizontal, vertical, rotatory, or mixed i.e., of two varieties

DISCHARGE SUMMARY

HISTORY AND PHYSICAL

Age: 005M

Rm# 753

DATE OF ADMISSION:

CHIEF COMPLAINT:

Head injury.

HISTORY OF PRESENT ILLNESS:

This five-month-old white male apparently was riding in the front seat with his back facing forward. The vehicle was involved in an accident and the air bag exploded striking the child's right occipitoparietal area. The child was taken initially to the Emergency Room at , had evaluation, CT scan which revealed a fracture of the right parieto-occipital area with contusion of the left frontotemporal area with a small subdural. The patient was noted to have continuous gaze toward the left and was irritable. The child had restraints applied and he was subsequently transferred here.

PAST HISTORY:

Reveals that the child was born some five weeks premature. He has had no serious medical illnesses.

PHYSICAL EXAMINATION:

The physical examination reveals the child to be somewhat irritable.

HEENT:

He has a large subgaleal hematoma of the right parieto-occipital area. He has nystagmus with preference of gaze toward the left. The patient moves all extremities. Reflexes are symmetrical. Bilateral Babinskis.

Neck:

Not remarkable. X-rays appear normal.

Chest:

Symmetrical. Clear to auscultation and percussion. No abnormal masses. No bruises.

Abdomen:

Negative.

Anorectal:

Not done.

Genitalia:

Normal for age.

HISTORY AND PHYSICAL

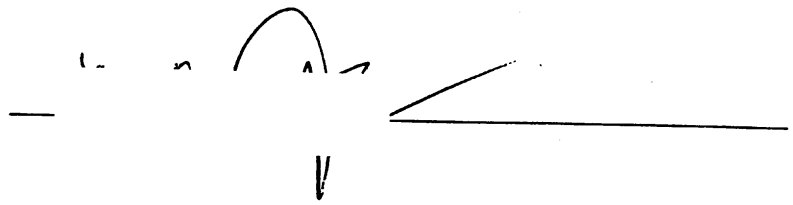
HISTORY AND PHYSICAL

Age: 005M

Rm# 753

IMPRESSION:

1. Closed head injury with right parieto-occipital skull fracture with left frontotemporal contusion and small subdural hematoma.



HISTORY AND PHYSICAL

D

PAGE: 1

MR NO:

DISC DISC PHYS: PRINTED: DATE TIME 0029

URINALYSIS

COLOR	APPEAR	SP GRAV 1.003 1.025	PH 4.6-8.0	PROT NEG MG/DL	GLUC NEG MG/DL	KET NEG MG/DL	BILI NEG
YELLOW	CLOUDY	1.025	5	NEG	TRACE	NEG	NEG
SLD NEG	NITRITE NEG	URO 0.1-1.0 EU/DL	WBCS 0-5 /HPF	RBCS 0-3 /HPF	CASTS NEG /HPF		
NEG	NEG	0.2	NONE	NONE	NONE		

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PATIENT NAME:
ORDERING DR :
EXAM DATE:
INPATIENT -
EXAM: *CT HEAD W/O CONTRAST

M/R NUMBER:
RADIOLOGY NUMBER:
TRANSCRIBE DATE:
ORDER NUMBER:
ACCT. NUMBER:

Clinical Data: Follow up of subdural hematoma. Skull fracture.

CT BRAIN SCAN: Direct axial CT slices of the brain were performed without contrast enhancement and are compared with the study obtained at [redacted] dated [redacted]. Today's examination demonstrates a very small thin subdural hematoma in the left frontal parietal region. It measures about 3 mm in thickness and about 1.7 cm in length. There is really no significant mass effect.

There is a skull fracture noted posteriorly in the left parietal bone with a small depressed bone fragment measuring about 3 mm in thickness and about 6 mm in length. I think there is very minimal adjacent brain edema.

The study obtained at [redacted] demonstrated what looked like a small intracerebral hematoma on the left side. However, I don't think this is definitely present on today's examination. Ventricular size is normal. Note is made of a cavum septum pellucidum. No contralateral abnormalities are detected.

IMPRESSION: A small minimally depressed skull fracture in the posterior left parietal bone and a small subdural hematoma in the left anterior parietal-frontal region.

VERIFIED DATE:

Referring Physician:

Interpreting Physician:

Tested by:

DATE:

EEG#

DESCRIPTION OF THE EEG: The electroencephalogram was accomplished during the drowsy state. Some movement and muscle artifact occurred but it was otherwise technically satisfactory.

INTERPRETATION: The recording revealed a medium amplitude background rhythm in the range of 3 to 4 cycles per second. This activity when seen was most prominently distributed in the central and frontal head regions symmetrically. During lighter stages of drowsiness, activity in the range of 5 to 7 cycles per second appeared and was of somewhat higher amplitude on the left than the right. Low amplitude fast activity was noted persistently throughout the recording. Hyperventilation could not be accomplished and photic stimulation revealed little evidence of a driving response.

IMPRESSION: The recording is **essentially normal** for this age during the sleeping state with premedication. No definite focal or epileptogenic activity could be seen and the slight asymmetry during drowsiness is not felt to be of clinical significance.

CLASSIFICATION: **ESSENTIALLY NORMAL, SLEEPING**

SIGNATURE ON FILE
